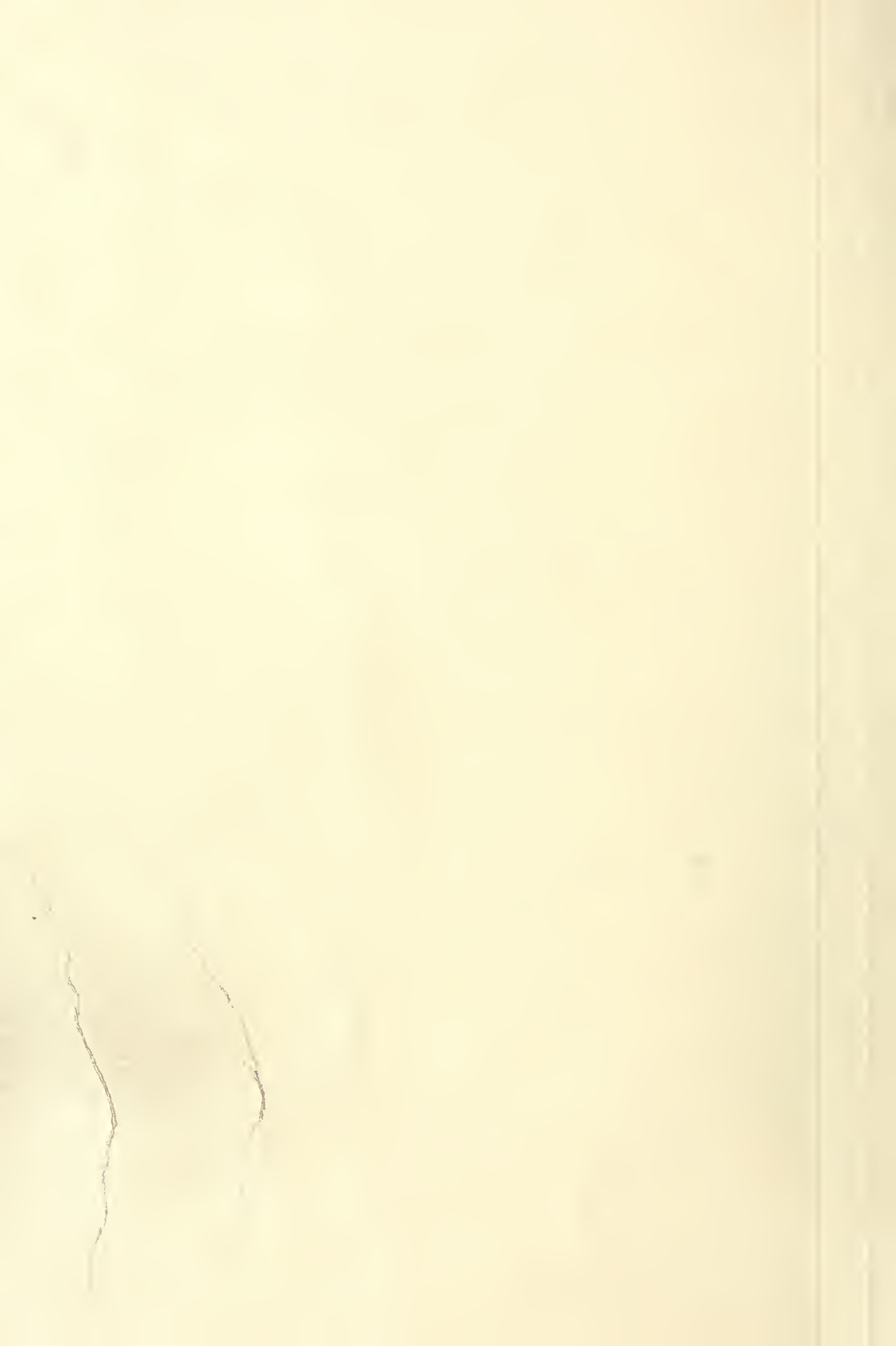


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Annual Catalog

1919



Kendall & Whitney
PORTLAND, ME.

1858 -- 1919

THIS IS OUR
SIXTY-FIRST
BUSINESS YEAR

Illustrated and Descriptive

❁ CATALOG ❁
OF
GARDEN, FIELD AND FLOWER



KENDALL & WHITNEY

Seed Merchants, Importers, and Wholesale and Retail

DEALERS IN

Agricultural and Horticultural Implements, Lawn Mowers, Gasoline Engines, Sprayers, Insecticides, Fertilizers, Poultry and Dairy Supplies, Wooden Ware, Galvanized Iron Ware, Baskets, Brooms, Brushes, Cordage, Fruit Jars, Jar Rings, Kitchen Sundries, Etc.

☞ The extraordinary conditions of the past few years still prevail, and the continued unsettled state of affairs makes it almost impossible to publish a catalog with prices acceptable for any length of time. While we are holden to all our friends and customers, to make the very best prices possible, yet we must reserve the right to increase these prices over the ones here printed, should the times make it necessary, but we will be glad to REDUCE them should future conditions give us that privilege.



FOOD—more than ever is the great problem the world over, and only by concerted effort on the part of both the farmer and the seedsman will this problem be solved. We will endeavor to do our part, and we are looking forward to satisfactory harvests next season, for we know that the loyalty and enthusiasm of the farmers all over the country is at a high pitch, and their response will be immediate and thorough.

We must not only feed ourselves, but the nations across the seas will look to us for help for a long time to come. Our answer should be **more acres planted, and more food produced**. We are expecting a larger demand for supplies than last season, so to avoid disappointments place your order for Seeds and Implements—**EARLY**.

Name and address should always be plainly given. Frequently we receive unsigned letters. Sometimes they contain money and orders. Sometimes, too, letters are received in which the name of the town is left out and the postmark is blurred.

Please write your Name, Post Office, County and State in full, as plainly as possible, your name especially written very distinctly.

Kindly inform us promptly on the arrival of orders if anything proves otherwise than expected. Mail orders receive our most careful attention, but if errors occur, we are anxious to correct them.

Seeds forwarded by Parcel Post, Express or Freight, as the purchaser may wish. In shipping we make no charge for delivery to railroads and express companies. Bags charged at value.

Prices quoted in our Catalog are subject to change without notice.

All sums to the amount of one dollar and upwards may be sent at our risk if forwarded according to the following directions, viz.: by Post Office Money Orders, Bank Drafts or Cash sent in a Registered Letter.

ALL CORRESPONDENCE ANSWERED PROMPTLY

Telephone Orders Given Immediate Attention. Call Portland 3953

While we exercise the greatest care to have all Stocks the best and most reliable, we do not give, and our employees are forbidden to give any warranty, express or implied, as to description, quality, productiveness, or any other matter of any Seeds, Bulbs, or Plants that we send out, and we will be in no way responsible for the crop. If the purchaser does not accept the goods on these terms, they must at once be returned.—K. & W.

KENDALL & WHITNEY

BRIEF HINTS

ON THE SOWING AND CULTIVATION OF

Flower and Vegetable Seeds

The Soil and Its Preparation



THE best soil for nearly every purpose is a light, rich loam. Where the soil is too light, a thin layer of clay, if to be had, should be spread over the surface in the autumn, and dug in—after being pulverized by the winter frosts—in the spring. This, with the use of old manure, will keep the garden in good condition. Deep and thorough trenching in the autumn, if possible, and the application of very old or decayed manure or leaf mold, will give a well prepared and suitable soil.

Period for Sowing

This must depend much upon the season as well as the locality. As a general rule for New England, the proper time to commence sowing is about the last of April, though a few sorts may be planted as soon as the ground can be made ready; and for a succession the sowing should be continued until June. To avoid all danger of injury, the sowing may be deferred, but when a little labor is of no consideration the sowing may be made earlier, and, in case of failure or injury from frost or wet, another sowing may be made when the weather is more favorable.

It is the great error to cover too deeply, and the cause of more than half of the complaints against seedmen of selling old and worthless seeds comes from inexperience and want of judgment in sowing. There are many contingencies to meet in getting a crop, and frequently the best seed of the strongest vitality will not come up, on account of some unknown or unfavorable climatic conditions, but all our seeds are thoroughly tested and inspected, both for vitality and for purity, and we never knowingly send out seeds which will not grow or that are not in every way superior.

There are several aids to the economical management of the garden, which are almost indispensable; one of these is the *hotbed* frame for the forwarding of plants for early planting—a frame made of various sizes, according to the size of the garden, from four sashes upward. The length of sash is generally six feet, by three wide, the size of glass six by eight inches. The frame should have a southern or a southeastern exposure; should be made up of fresh horse manure, and a few leaves mixed with it; this must be laid in a heap preparatory to being used, and when in a proper state of fermentation, prepared for the reception of the frame. A few inches of rich, loamy soil must be spread over the manure; then cover the frame with the sashes, and after standing a few days, to allow the rank heat and steam to pass off, the seed can be sown. Where the ground is well drained, a better plan is to dig out a space the size of the frame, one or two feet deep, according to the season and the heat required, in which the manure is placed, care being taken to pack firmly and evenly.—K. & W.

CONDENSED INFORMATION CONCERNING THE RATES OF POSTAGE FOR PARCEL POST OR FOURTH CLASS MAIL

Wt. in lbs.	Local.	Zones.			
		1st Up to 50 miles.	2nd 50 to 150 miles.	3rd 150 to 300 miles.	4th 300 to 600 miles.
1	\$0.05	\$0.05	\$0.05	\$0.06	\$0.07
2	.06	.06	.06	.08	.11
3	.06	.07	.07	.10	.15
4	.07	.08	.08	.12	.19
5	.07	.09	.09	.14	.23
6	.08	.10	.10	.16	.27
7	.08	.11	.11	.18	.31
8	.09	.12	.12	.20	.35
9	.09	.13	.13	.22	.39
10	.10	.14	.14	.24	.43
11	.10	.15	.15	.26	.47
12	.11	.16	.16	.28	.51
13	.11	.17	.17	.30	.55
14	.12	.18	.18	.32	.59
15	.12	.19	.19	.34	.63
16	.13	.20	.20	.36	.67
17	.13	.21	.21	.38	.71
18	.14	.22	.22	.40	.75
19	.14	.23	.23	.42	.79
20	.15	.24	.24	.44	.83
21	.15	.25	.25	.46	.87
22	.16	.26	.26	.48	.91
23	.16	.27	.27	.50	.95
24	.17	.28	.28	.52	.99
25	.17	.29	.29	.54	1.03
26	.18	.30	.30	.56	1.07
27	.18	.31	.31	.58	1.11
28	.19	.32	.32	.60	1.15
29	.19	.33	.33	.62	1.19
30	.20	.34	.34	.64	1.23
31	.20	.35	.35	.66	1.27
32	.21	.36	.36	.68	1.31
33	.21	.37	.37	.70	1.35
34	.22	.38	.38	.72	1.39
35	.22	.39	.39	.74	1.43
36	.23	.40	.40	.76	1.47
37	.23	.41	.41	.78	1.51
38	.24	.42	.42	.80	1.55
39	.24	.43	.43	.82	1.59
40	.25	.44	.44	.84	1.63
41	.25	.45	.45	.86	1.67
42	.26	.46	.46	.88	1.71
43	.26	.47	.47	.90	1.75
44	.27	.48	.48	.92	1.79
45	.27	.49	.49	.94	1.83
46	.28	.50	.50	.96	1.87
47	.28	.51	.51	.98	1.91
48	.29	.52	.52	1.00	1.95
49	.29	.53	.53	1.02	1.99
50	.30	.54	.54	1.04	2.03
51	.30	.55	.55	1.06	
52	.31	.56	.56	1.08	
53	.31	.57	.57	1.10	
54	.32	.58	.58	1.12	
55	.32	.59	.59	1.14	
56	.33	.60	.60	1.16	
57	.33	.61	.61	1.18	
58	.34	.62	.62	1.20	
59	.34	.63	.63	1.22	
60	.35	.64	.64	1.24	
61	.35	.65	.65	1.26	
62	.36	.66	.66	1.28	
63	.36	.67	.67	1.30	
64	.37	.68	.68	1.32	
65	.37	.69	.69	1.34	
66	.38	.70	.70	1.36	
67	.38	.71	.71	1.38	
68	.39	.72	.72	1.40	
69	.39	.73	.73	1.42	
70	.40	.74	.74	1.44	

Fourth Class Matter Embraces that known as domestic parcel post mail, and includes merchandise, farm and factory products, seeds, cuttings, bulbs, roots, scions and plants, books (including catalogs), miscellaneous printed matter weighing more than 4 pounds, and all other mailable matter not embraced in the first, second and third classes.

RESTRICTIONS

Size limit, 84 inches in length and girth combined.

Four ounces or under, 1 cent per ounce.

Over four ounces considered one pound.

Fractional pounds considered pounds.

Weight limit up to and including third zone, 70 pounds; beyond that, 50 pounds.

SPECIAL

Classification excludes matter of a character perishable within a period reasonably required to transport and deliver, and parcels of form and kind likely to injure postal employees or equipment or other mail matter.

SEEDS IN PACKETS OR OUNCES ONLY

The following may be selected from our catalog, at the prices named, and will be forwarded, postage free, to any part of the United States.


Purchasers remitting \$1.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packets or ounces to the amount of 25 cents.

Purchasers remitting \$2.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packets or ounces to the amount of 50 cents.

Purchasers remitting \$3.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packets or ounces to the amount of \$1.00.

Purchasers remitting \$4.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packets or ounces to the amount of \$1.50.

Purchasers remitting \$5.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packets or ounces to the amount of \$2.00.

 **Seeds when ordered in LARGER QUANTITIES than the above (as quarts or pounds) WILL NOT BE INCLUDED, NOR PLANTS OR BULBS.**



A DESCRIPTIVE LIST OF FLOWER SEEDS

Flower Seeds Sent Free by Mail
on Receipt of Price



ANNUALS.

These are plants which bloom the first season from seed, and are the most generally grown of all flowering plants. There is no place in the garden where some of them will not grow, and their bright colors are the source of continued enjoyment. A list of the perennials will be found on pages 15-16.



ABRONIA UMBELLATA.

Per Pkt.

Handsome, trailing annuals, with clusters of sweet-scented flowers resembling the verbenas. Fine for baskets or for the garden. Blooms from August until October

5

ABRONIA UMBELLATA.

ACROLINIUM.

An elegant, half-hardy annual, producing beautiful everlasting flowers. Grows about one foot high.

Mixed 5

ADONIS.

A hardy annual, with very pretty foliage, producing bright red flowers. Grows about one foot high and blooms for a long time

5

AGERATUM.

Half-hardy, free-flowering annuals, blooming throughout the season. Fine for beds or borders.

FINE MIXED. 1 ft. 5
IMPERIAL DWARF BLUE. 8 in. 5
PERFECTION DARK BLUE. 1 ft. 5



AGERATUM.

ALYSSUM.

A hardy annual, about eight inches high, with clusters of small, fragrant flowers. Fine for bedding and bouquets.

SWEET. White; 1 ft. 5
TOM THUMB. Very dwarf; white 5



ALYSSUM.

ANTIRRHINIUM. (Snap Dragon.)

GIANT VARIETIES.

Per Pkt.

A very showy and half-hardy perennial (used mostly, however, as an annual), about three feet high, flowering well the first season. Sow the seeds early, in pots or under glass. An improvement over the old variety, producing longer spikes and larger flowers.

ROSE 5
SCARLET. 5
SCARLET. White throat. 5
WHITE 5
YELLOW 5
YELLOW AND SCARLET. 5
MIXED 5



ANTIRRHINIUM.

HALF DWARF.

Fine for bedding, about eighteen inches high.

MIXED 5

AMARANTHUS.

Half-hardy annuals, about two feet high, with finely variegated foliage. They are most brilliant on poor soil and in dry seasons.

TRICOLOR 5

AMMOBIUM ALATUM.

A useful everlasting for making dried winter bouquets and a showy border plant, growing freely in any garden soil. Hardy annual.

WHITE. 2 ft. 5

AMPELOPSIS—Veitchii. (Boston Ivy.)

Popular, rapid-growing, hardy vine. Adheres firmly to stone or brick, foliage turning very brilliant in the autumn.

5

ANAGALLIS.

Beautiful, trailing, hardy annuals, about six inches high and very desirable for small beds, edgings, baskets, etc.

MIXED 5

ASPERULA.

A most profuse-blooming, hardy annual, attaining an average growth of one foot, the flowers of which are a beautiful light blue, are very sweet scented, and last a long while in perfection. 1 ft.

5

ASTER.

Very beautiful and popular half-hardy annuals, growing from ten to eighteen inches high. For profusion of flowers and richness of display, the asters are unrivalled. Sow the seed early in the spring, under glass or in pots in the house, and transplant into rich soil, about one foot apart.

ASTER—Continued.**DWARF VARIETIES.**

QUILLED ASTER.

DWARF CHRYSANTHEMUM FLOWERED. A free bloomer, with large flowers; mixed; 1 ft. 10

TRIUMPH. Deep scarlet, a rich, brilliant color. Each plant bears thirty to forty flowers of great beauty; 8 in. 10

SEMI-DWARF VARIETIES.

COMET. A variety of great beauty. Grows in pyramidal form thirteen to fifteen inches high, covered with large double flowers with long curled petals. Choicest mixed varieties 10

CARTER'S WHITE PLUME. One of the most magnificent white asters yet produced; height about fifteen inches. 10

MIGNON. Flowers profusely; very popular, especially with florists.

PURE WHITE 10
MIXED COLORS 10

BETTERIDGE QUILLED. Perfectly double quilled flowers of beautiful mixed colors 5

BLUSH QUEEN. Large flowers of a delicate blush color, and borne in great profusion 10

QUEEN OF THE MARKET. Finest mixed; very early 10

VICTORIA. Very large, of perfectly double form.

WHITE 10
MIXED 10

TALL VARIETIES.

COCARDEAU OR CROWN. The flowers of this variety have large white centers bordered with scarlet, carmine, violet or blue; attractive and beautiful; 2 ft. 10

CREGO. The finest of all comet asters, having immense flowers resembling chrysanthemums.

LAVENDER 10
PINK 10
WHITE 10
MIXED 10

TRUFFAUT'S PEONY-FLOWERED PERFECTION. A beautiful early flowering variety. The flower is densely double, and the petals so symmetrically incurved as to resemble a perfect ball. Mixed colors; 2 ft. 10

PEONY-FLOWERED PERFECTION ASTER.

OSTRICH FEATHER. Very large bloom, with long, fringe-like petals, similar in shape to Japanese chrysanthemum. 10

SEMPLE'S BRANCHING. A superior and free-flowering class. The flowers are large, with graceful, wavy petals on long stems; excellent for cutting; 2 ft.

LAVENDER 10
PINK 10
CRIMSON 10
WHITE 10
PURPLE 10
FINEST MIXED. All colors 10
CHINESE. Common variety; mixed 5

BACHELOR'S BUTTON.

Per Pkt.

A showy, hardy annual, about two feet high, succeeding well in any soil. Set six inches apart.

FINEST MIXED 5

DEEP BRIGHT BLUE 5

DOUBLE BLUE 10



BACHELOR'S BUTTON.

BALSAM.

Most magnificent, popular, half-hardy annuals, from one and one-half to two feet in height. Sow the seeds early in frames, and transplant to a well enriched border one foot apart.

FINE DOUBLE. Mixed 5

ROSE-FLOWERED 5

CAMELIA-FLOWERED. Finest mixed 5



DOUBLE BALSAM.

BARTONIA AUREA.

A showy, half-hardy annual, growing about two feet high, bearing very brilliant yellow flowers. Thin plants to six inches apart. 5

BEANS.

(Flowering.)

See list of beans with vegetable seeds.

BRACHYCOME IBERIDIFOLIA.

(Swan River Daisy.)

Very pretty, free-flowering, dwarf-growing annual; well adapted to edgings, rustic baskets, or pot culture.

MIXED BLUE AND WHITE. ½ ft. 5



SWAN RIVER DAISY.

BROWALLIA.

Handsome, profuse-blooming annual, covered with beautiful flowers during the summer and autumn months.

ELATA COERULEA. Blue; 1½ ft. 5

ALBA. White; 1½ ft. 5

FINE MIXED 5

CALENDULA.

Free-flowering, hardy annual, growing in any good garden soil, producing a fine effect in beds or mixed borders. 1 to 1½ ft.

METEOR. Double; yellow striped orange 5

PRINCE OF ORANGE. Double; dark orange 5

FINEST DOUBLE MIXED 5



CALENDULA.



CALCEOLARIA.

CALCEOLARIA.

Per Pkt.

Indispensable for the greenhouse or the flower garden. They succeed in any light, rich soil. Half-hardy perennials.

CHOICE MIXED VARIETIES.... 25

CANDYTUFT.

A well-known, hardy annual, very useful for bedding and bouquets, and also for pot culture.

EMPRESS. Large trusses of pure white flowers; very handsome. Used for forcing. Ounce 40c.. 5

LITTLE PRINCE. Large heads of pure white flowers. Plants about six inches high. Ounce 40c. 5

CRIMSON. Ounce 25c..... 5

PURPLE. Ounce 25c..... 5

WHITE. Ounce 25c..... 5

FINEST MIXED. Ounce 25c..... 5

ROCKET. Pure white, long spikes. Ounce 25c..... 5



CANDYTUFT.

CANARY BIRD FLOWER.

A rapid-growing, delicate climber, reaching a height of from ten to fifteen feet. Bright yellow, fringed; exceedingly beautiful foliage. Half-hardy annual..... 5

CANNA.

Handsome foliage plants, growing from three to eight feet high. Highly ornamental on the lawn. Soak the seed in warm water for about twelve hours. Seeds should be sown early in a strong, moist heat.

FINEST MIXED..... 5



CANARY BIRD FLOWER.

CATCHFLY.

A hardy annual, about one foot high; produces brilliant flowers in great profusion in early summer.

RED..... 5

WHITE..... 5

PINK..... 5

MIXED..... 5

CENTAUREA.

Silver-leaved plants, fine for ribbon borders, baskets, etc.

CANNIHISSIMA. Thick foliage; ¾ ft..... 10

GYMNOCARPA. Graceful white foliage; ¾ ft..... 10

CINERARIA.

Well-known favorite, free-flowering plants for the greenhouse, which may be had in splendid bloom through the greater portion of the year, and from the richness and diversity of the colors are among the most valuable of our early spring flowers; succeed best in light, rich, free and open soil. Greenhouse perennial.

CARTER'S BRILLIANT PRIZE. Choicest varieties..... 25

FINE MIXED VARIETIES..... 25

CHRYSANTHEMUM.

Per Pkt.

Handsome, hardy annual, about two feet high, blooming from July to October.

DOUBLE WHITE..... 5

DOUBLE YELLOW..... 5

DOUBLE MIXED..... 5



CLARKIA.

CLARKIA.

A very beautiful hardy annual, about eighteen inches high, blooming from June to September. Set six inches apart.

FINE MIXED. Ounce 30c..... 5



COBÆA SCANDENS.

COBÆA SCANDENS.

The most useful of climbers, on account of its rapid growth, fine foliage, and large, bell-shaped flowers, purple in color. In sowing place the seeds edgewise and cover lightly... 10

COCKSCOMB.

Very singular and attractive, half-hardy annuals, about two feet high. To perfect the flowers they should be sown in the hotbeds and transplanted into rich soil one foot apart.

MIXED. Double..... 10

COLEUS.

One of the most popular foliage plants. Is very decorative in the flower border, and easily grown from seed, which frequently produces new and distinct varieties.

NEW HYBRIDS. Mixed..... 15



MORNING GLORY.

CONVOLVULUS MAJOR.

(Morning Glory.)

A well-known beautiful, climbing annual, suitable for covering arbors, trellises, etc. Blooms from July until autumn.

FINE MIXED. Ounce 10c. 5

JAPANESE. Gigantic flowers, exquisite new colors, magnificent foliage. Finest mixed..... 5

CONVOLVULUS MINOR.

Beautiful and showy, half-hardy annuals, producing an abundance of rich colored flowers. Set plants one foot apart. Blooms from July until autumn.

FINE MIXED..... 5

MAURITANICUS. Beautiful for hanging baskets and vases. Flowers blue..... 5



COREOPSIS.

COREOPSIS.

Per Pkt.

Showy, hardy annuals about two feet high, succeeding well in any soil. Produces a fine effect when grown in a mass. Blooms from June until September.

FINE MIXED 5
 DRUMMOND'S. Large yellow. 5



COSMOS.

COSMOS.

Splendid flower for cutting purposes, plants growing five to seven feet high, which are beautiful masses of the most elegant foliage, with hundreds of large, showy blossoms. Both foliage and flowers are excellent for cutting. Sow seed early in spring and transplant to the garden in June.

EARLY FLOWERING. Mixed colors..... 10
 LADY LENOX. Tall growing, late variety, with gigantic shell-pink flowers, borne on long stems..... 10

CYPRUS VINE.

One of the most popular of all summer climbers; flowers small, thickly set in a most beautiful dark-green foliage, forming a striking contrast. Tender annuals.

SCARLET..... 5



DAHLIA.

DAHLIA.

Plant in a shallow box or pan early in March or April, transplant carefully and keep the soil moderately moist. When all danger from frost is over set out in the bed or border in the garden.

FINEST MIXED. Single... 10
 FINEST MIXED. Double.. 10

DATURA.

Beautiful, half-hardy annual, growing from two to three feet in height and producing very large flowers; continues in bloom from July until September.

MIXED 5

DRACOENA.

Beautiful, ornamental-leaved plant, extensively used in vases and for house decoration.

INDIVISA. Narrow, dark green foliage..... 10

ESCHSCHOLTZIA.
(California Poppy.)

A very showy, hardy annual, about one foot high, blooming from June until September. Produces a brilliant effect; admirable for borders when grown in a mass.

ALBA. White..... 5
 CALIFORNICA. Yellow; orange center 5
 MANDARIN. Orange and scarlet..... 5
 FINEST SINGLE MIXED... 5
 CARTER'S CARMINE KING. A splendid new variety, of a beautiful carmine-rose color..... 10
 MANDARIN. Double; orange and scarlet..... 10



ESCHSCHOLTZIA.

FEVERFEW. (Pyrethrum.)

Per Pkt.

Handsome, free-flowering, highly ornamental plants, producing a fine effect in the mixed flower and shrubby borders. Succeeds in any rich soil.

DOUBLE WHITE..... 5
 GOLDEN FEATHER. Prized for its yellow foliage..... 5

FRENCH HONEYSUCKLE.

A fine border plant.

WHITE..... 5
 RED..... 5
 MIXED..... 5

GAILLARDIA.

Showy and universally-admired annual. Very beautiful; fine for bedding and bouquets.

FINE MIXED..... 5

GOURDS.

A valuable and highly interesting class of climbing plants. Tender annuals.

AFRICAN PIPE. The stem end used in making pipes..... 5
 BOTTLE. Well known, bottle shaped..... 5
 HERCULES CLUB. Club shaped; very long..... 5
 NEW MINIATURE. Orange and green striped; one of the best..... 5
 ORANGE. Very ornamental, fruit resembling an orange.... 5
 POWDER HORN..... 5
 FINE MIXED..... 5

GLOBE AMARANTH.

A tender annual, about two feet high, very ornamental in the garden. The flowers will retain their beauty for a long time if gathered and dried as soon as they are open. Start early in hot-beds, and transplant one foot apart in the border when the weather becomes warm.

MIXED 5



GLOXINIA.

GLOXINIA.

Greenhouse plants, producing richly colored and brilliant flowers. Greenhouse perennial.

CARTER'S INVINCIBLE PRIZE.

Contains all the best self-colors, crimson, sapphire, purple, ruby, rose, bluish violet and white, together with the most beautiful spotted or marbled kinds..... 25

GRASSES. (Ornamental.)

The ornamental grasses produce a beautiful and pleasing contrast when interspersed with flowering plants. Most of the varieties may be dried for winter bouquets, or used for filling vases, either in a dried or a green state.

Egrotis Nebulosa.

One of the most graceful grasses in cultivation. Hardy annual; 1½ ft. 5

Avena Sterilis. (Animated Oats.)

Very graceful, with large, drooping spikes on slender stems. Hardy annual; 2 ft. 5

Briza Maxima. (Quaking Grass.)

A most beautiful variety; one of the best. Hardy annual; 1½ ft. 5

Briza Gracilis. (Quaking Grass.)

Very delicate and graceful. Hardy annual; 1 ft. 5

Coix Lachrymac. (Job's Tears.)

A well-known variety. Half-hardy annual; 2 ft. 5

GRASSES—Continued.

	Per Pkt.
Eragrostis Elegans. (<i>Love Grass.</i>)	
A favorite variety, graceful habit and very much admired.	
Hardy annual; 2 ft.	5
Gynerium Argentium. (<i>Pampas Grass.</i>)	
The finest ornamental grass in cultivation. 10 ft.	5
Hordeum Jubatum. (<i>Squirrel Tail Grass.</i>)	
Very handsome light purple plumes. Hardy annual; 3 ft.	5
Lagurus Ovatus. (<i>Hare's Tail Grass.</i>)	
Small white plumes. Hardy annual; 2 ft.	5
Sectaria Microcheta.	
Large, drooping plumes of the most graceful description.	
Hardy annual; 2 ft.	5
Stipa Pennata. (<i>Feather Grass.</i>)	
One of the finest of the ornamental grasses. 2 ft.	5



GODETIA.

GODETIA.

Very attractive hardy annual of easy culture, about one foot high, flowering in July and August.

FINE MIXED 5

GREVILLEA ROBUSTA.

A very graceful decorative plant, with evergreen, fern-like foliage. Tender perennial. 5

GYPSOPHILIA.

A free-flowering annual that should be in every garden, for it thrives abundantly, furnishing the loveliest material for bouquets.

ELEGANS. Hardy annual; pure white 5

HELICHRYSUM. (Eternal Flower.)

A hardy annual, very ornamental in the garden, and very desirable for winter bouquets, as they will retain their form and color for years if gathered and dried when first open.

DOUBLE YELLOW 5

DOUBLE WHITE 5

DOUBLE SCARLET 5

DOUBLE PURPLE 5

DOUBLE FINE MIXED 5

HELIOTROPE.

A well-known, half-hardy perennial, particularly prized on account of its delightful fragrance. It is well adapted for hedging or pot culture. Sow the seeds early in spring, in pots or in the hothouse, and transplant into the garden when the weather becomes warm.

FINEST MIXED. Dark varieties 10



HELIOTROPE.

HUMULUS JAPONICUS. (Hop.)

An extremely rapid-growing climber, with handsome, variegated foliage. Hardy annual; 20 ft. 5

HYACINTH BEAN.

	Per Pkt.
Tender, climbing annual, producing clusters of blue and white flowers; 10 ft.	5

ICE PLANT.

A singular-looking, tender annual, with thick, fleshy leaves that have the appearance of being covered with crystals of ice. Start early in pots and transplant into light, sandy soil, in a warm situation 5

JACOBEE.

A very gay-colored, showy class of hardy annuals, very effective for hedging. Grows about one foot high.

DOUBLE FINEST MIXED 5

KOCHIA TRICHOPHYLLA. (Glowing Ball.)

This ornamental annual plant grows quickly from seed sown in the open ground, when the trees are coming out in leaf, and the plants are always of a rounded or globe-like form. The stems are clothed with slender, light green leaves. Early in the fall the ends of the shoots are set thickly with small, bright scarlet flowers, the bushy plants resembling balls of fire. The plants are equally showy planted singly to show the round ball-like form on all sides or grown in continuous rows 5

LANTANA.

Highly valuable plants of vigorous growth and branching habit, producing brilliantly-colored flowers constantly changing in hue. Very effective, either for pot culture or for hedging.

FINE MIXED 5

LARKSPUR.

Very beautiful, showy annuals, producing dense spikes of flowers, which are very decorative, either in the garden or when cut for vases. Set ten inches apart.

DWARF DOUBLE ROCKET. Finest mixed 5

DOUBLE BRANCHING. Fine mixed 5

LAVENDER.

A shrubby plant, blossom of delightful fragrance 5

LINUM. (Flowering Scarlet Flax.)

GRANDIFLORUM RUBRUM. Brilliant, dark scarlet. Hardy annual 5

LOBELIA.

Most excellent and useful plants, free-flowering and of easy culture. Fine for borders, baskets, vases and window boxes.

GRACILIS. Fine for hanging baskets, vases, etc.; light blue; trailing 5

CRYSTAL PALACE. Compact; dark blue; excellent for edging 5

WHITE GEM. The best white variety for edging 5

CARDINALIS. Long spikes, bright scarlet flowers 10



LOPHOSPERMUM.

LOPHOSPERMUM.

One of the most beautiful climbing annuals. Graceful flowers of large size, resembling foxgloves in shape, and of a rich rose color. The foliage is of velvety texture.

SCANDENS. Rose 10

LOVE-LIES-BLEEDING.

A hardy annual, three to four feet high, with pendant spikes of blood-red flowers 5

LOVE-IN-A-MIST.

Per Pkt.

A curious, hardy annual about one foot high, with finely cut leaves and singular flowers.

FINE MIXED 5

LUPINS.

Showy plants, two to three feet high, producing tall spikes of attractive flowers.

FINE MIXED. Annual 5

MALOPE.

Handsome, half-hardy annual, about two feet high. Set eighteen inches apart. Well adapted to mixed borders.

FINE MIXED 5

MARVEL OF PERU. (Four O'clock.)

The old and well-known four o'clock. A beautiful plant, with flowers of various colors, making a fine summer hedge when set one foot apart. Grows two feet high.

FINE MIXED 5



MARIGOLD.

MARIGOLD.

Extremely showy, half-hardy annual, one to two feet high, well adapted to garden culture, blooming profusely through the season. Set one foot apart.

AFRICAN. Double mixed 5

FRENCH. Double mixed 5

LEGION OF HONOR. Single flowering, about nine inches high; golden yellow, with large spot of velvety crimson 5

ORANGE. Double 5

MAURANDIA.

An elegant, half-hardy, climbing plant, blooming the first season if sown early, and is well adapted to the conservatory or trellis work in the garden. Start early in pots, transplant when the weather becomes warm. Continues in bloom through the season.

BARCLAYANA. Rich violet flowers. 10

ROSEA 10

PURPLE 10

FINE MIXED 10

MORNING GLORY. (See Convolvulus.)**MOURNING BRIDE. (Scabiosa.)**

A class of very pretty, hardy annuals, from one to two feet high, suitable for bedding or bouquets.

PURPLE 5

RED 5

WHITE 5

FINEST MIXED 5

MIGNONETTE.

A well-known, hardy annual, universally grown and esteemed for its delicious fragrance. If well thinned out, the plants will grow stronger and produce larger spikes of bloom.

Mignonette, Sweet.

Large-flowered variety, very fragrant. Per ounce, 15c. 5

Dwarf, Compact.

A very desirable variety, distinct in character, forming a dwarf, dense bush. 5



MIGNONETTE.

MIGNONETTE—Continued.

Per Pkt.

Large Flowered, Pyramidal.

Greatly superior to the old variety of pyramidal growth and much larger flowers 5

Machet.

The finest variety for pot culture; sweet-scented, red flowers. 5

White Pearl.

Flowers nearly white; a desirable variety 5

Gabriele.

A variety of dwarf pyramidal growth with large spikes of reddish flowers; fine for pots, or in the open ground 5

Allen's Defiance.

Spikes of immense size; deliciously fragrant 10

MIMULUS.

Handsome, profuse-blooming plants, with flowers of singular form and brilliant colors, fine for greenhouse or shady situations. Blooms from seed the first year.

FINE MIXED 10

MUSK PLANT.

Much esteemed for the strong musk odor of its leaves. It has a yellow bloom 10



NEMOPHILA.

NEMOPHILA.

Charming bardy, low annual, producing an abundance of extremely delicate and beautiful flowers. Very useful for bedding or for pot culture. Sow early in pots and transplant into a cool, rather moist, location.

INSIGNIS. Clear, bright blue, white center. 5

FINEST MIXED 5

NICOTIANA.

Deliciously fragrant flowers, very ornamental, of easy cultivation, excellent for cutting. Half-hardy annuals.

AFFINIS. White, very fragrant 5

SYLVESTRIS. Plants of pyramidal growth, about four feet high. Flowers pure white and very fragrant 10

SANDERAE. Branching habit; two feet. Strikingly beautiful plants. Blossoms brilliant carmine-red; delicious fragrance. 10



NICOTIANA.

NIEREMBERGIA GRACILIS.

Profuse-blooming little plants, with white, lilac-shaped flowers; exceedingly valuable for small beds, edging and rustic baskets or vases. 10

NOLANA.

Very pretty trailing, hardy annuals; fine for rockwork, hanging baskets or for bedding. Select light, rich soil.

FINE MIXED 5



NASTURTIIUM.

One of the most popular flowers of the present time, and constantly growing in favor. Is a rapid climber, of easiest culture, bearing beautifully colored flowers in profusion until killed by frost. Hardy annual.

The "K. & W." Mixed Varieties, both Tall and Dwarf, cannot be surpassed for brilliancy and variety of color. The plants, for about three months in the year, produce a lavish profusion of bloom, even through the hottest weather, and a trial of them is sure to give great satisfaction.

NASTURTIIUM. (Tall.)

	Per Pkt.
Coccineum. Scarlet.....	5
CRIMSON	5
DUNNETT'S ORANGE. Pure orange.....	5
EDUARD OTTO. Brownish lilac.....	5
HEINEMANNI. Chocolate color	5
PEARL. Creamy white	5
PRINCE HENRY. Cream, spotted and tipped scarlet	5
REGELIANUM. Purplish violet.....	5
SCARLET.....	5
SHELLINGHI. Yellow spotted	5
SCHEUCRIANUM. Straw colored, spotted brown	5
VESUVIUS. Salmon-rose; an exquisite shade	5
VON MOLTKE. Dark rose	5
YELLOW	5
VARIEGATED FOLIAGE. Mixed colors.....	5
IVY-LEAVED FOLIAGE. Leaves are an English ivy-leaved type, while the flowers are of a most delicate fringed formation. Mixed colors.....	5

"K. & W." Mixed Varieties.

1 lb.	½ lb.	¼ lb.	1 oz.	Pkt.
\$1.60	.85	.50	.15	.05

COLLECTION OF 6 PKTS., 25

NASTURTIIUM LOBBIANUM.

This class is remarkable for the intensely brilliant colors of its flowers, blooming most profusely, and is very useful for covering verandas, or for trellis and rustic work. Half-hardy annual.

MADAME GUNTER HYBRIDS. A French strain, noted for its fine colors.....	5
MARGUERITE. Pale yellow, flushed blood red	5
FINE MIXED	5

NASTURTIIUM—Continued.

NASTURTIIUM. (Dwarf.)

Per Pkt.

The dwarf improved varieties of nasturtium are among the most useful and beautiful of garden favorites for bedding, massing or ribboning. Hardy annuals.

BRONZE. Bronze-orange	5
CLOTH OF GOLD. Scarlet flowers and yellow foliage	5
CRIMSON	5
CRYSTAL PALACE GEM. Sulphur, maroon blotches.....	5
EMPRESS OF INDIA. Fiery crimson, dark foliage.....	5
GOLDEN KING. Rich, golden yellow.....	5
KING THEODORE. Deep crimson maroon, dark foliage.....	5
KING OF TOM THUMBS. Dark scarlet, dark leaves.....	5
LADY BIRD. Orange-yellow; suffused with red and a bright red blotch at the base of the petals.....	5
RUBY KING. Rich crimson rose	5
SCARLET.....	5
SPOTTED. Golden yellow, spotted garnet.....	5
YELLOW	5
VARIEGATED FOLIAGE. Mixed colors	5
IVY-LEAVED FOLIAGE. Identical in style with the tall variety. Mixed colors.....	5
LILLIPUT. The most dwarf of all nasturtiums. Of compact growth with the bloom in a beautiful mass above the foliage; fine for potting and bedding	5

"K. & W." Mixed Varieties.

1 lb.	½ lb.	¼ lb.	1 oz.	Pkt.
\$1.60	.85	.50	.15	.05

COLLECTION OF 6 PKTS., 25

OXALIS.

Elegant flowering plants, particularly adapted for the greenhouse or parlor, where they bloom in mid-winter.

FINE MIXED VARIETIES.....	10
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OENOTHERA. (Evening Primrose.)

A half-hardy annual and perennial, about six inches high, bearing bright, showy flowers in white, pale yellow, rose, etc. Of the easiest culture.

MIXED ANNUAL SORTS	5
MIXED PERENNIAL SORTS	5

SWEET PEAS

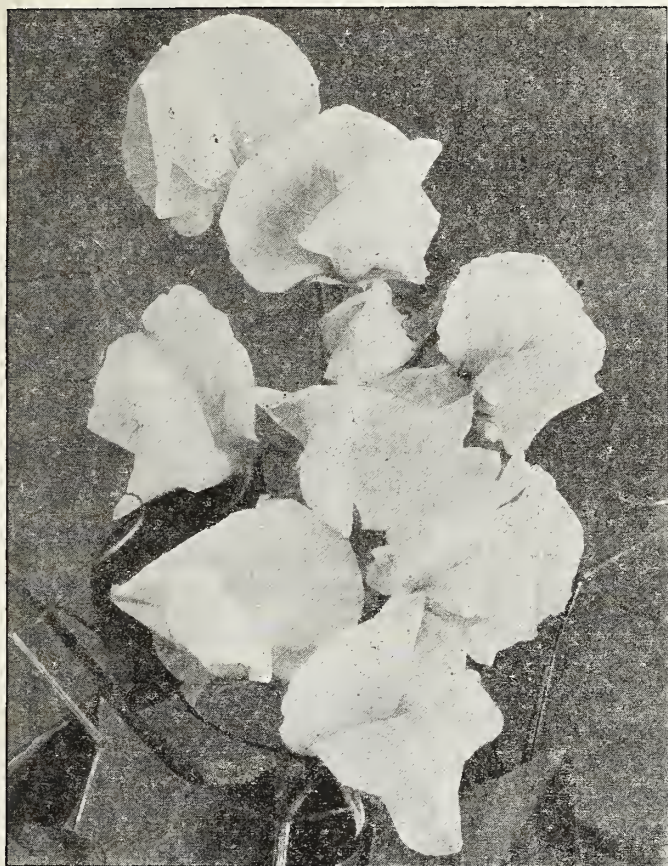
Sweet peas are among the most desirable hardy annuals grown, being exceedingly beautiful and highly ornamental, and will grow and blossom well in any good garden soil. Select an open, sunny location, and sow as early as the ground can be worked in the spring, to enable the vines to get a good strong growth before the warm weather comes.

SUPERB FLOWERED SPENCER VARIETIES.

The Waved or Spencer class represents a type of sweet pea the original of which, the Countess, is still the best and most popular pink. They are strong growers, bear long stems and very large blossoms, with usually four blossoms to a stem. The standard is large, round, and fluted or wavy on the edges. The wings, too, are large and more or less wavy, but not so much so as the standard.

The following named varieties constitute a list of many of the finest strains produced.

	Pkt.	Oz.
WHITE.		
ENCHANTRESS. Fine pure white.....	5	20
KING WHITE. Giant white; the largest white Spencer type.....	5	20
WHITE SPENCER. Large pure white	5	20
PRIMROSE, CREAM OR IVORY.		
MRS. C. W. BREADMORE. Primrose, with rose edge	5	20
LIGHT PINK SHADES.		
APPLE BLOSSOM. Rosy pink, blended with light blush	5	20
COUNTESS. Fine pure, clear pink; very large.....	5	20



SWEET PEAS.

SWEET PEAS (SPENCER VARIETIES)—Continued.

	Pkt.	Oz.
DEEP, BRIGHT PINK.		
DAZZLER. Brilliant orange pink.....	5	20
MARY GARDEN. Clear pink on cream.....	5	20
NEW MARION BEAVER. Finest shade of pink. Color salmon shell-pink on cream.....	5	20
ROSABELLE. Giant rosy pink.....	5	20
ST. GEORGE. Orange pink, nearly flame color....	5	20
ORANGE AND SALMON.		
BARBARA. Handsome large salmon orange.....	5	20
BERTRAND DEAL. Rosy mauve on cream.....	5	20
ILLUMINATOR. Salmon cerise and orange.....	5	20
MELBA. Pale salmon.....	5	20
ROBERT SYDENHAM. Rich orange salmon.....	5	20
SHADES OF RED.		
AMERICA. Bright red, striped with white.....	5	20
KING EDWARD. Pure, deep red; very large.....	5	20
SUNPROOF CRIMSON. Brilliant crimson; large....	5	20
THE PRESIDENT. Brilliant, dazzling orange scarlet	5	20
VERMILION BRILLIANT. Intense, bright scarlet...	5	20
EDGED.		
BLUE PICOTEE. White, with blue edge.....	5	20
DAINTY. White, with rose pink edge.....	5	20
MARTHA WASHINGTON. White edged with rose....	5	20
MRS. C. W. BREAMORE. Primrose, with rose edge	5	20
LAVENDER SHADES.		
ASTA OHN. Pinkish lavender.....	5	20
AGRICOLA. Lavender and bluish.....	5	20
FLORENCE NIGHTINGALE. Soft bluish lavender....	5	20
MASTERPIECE. Lavender, tinted mauve.....	5	20
SHADES OF BLUE.		
MARKS TEY. Violet-bronze wings.....	5	20
ZEPHYR. Bright blue.....	5	20

SWEET PEAS—Continued.

	Pkt.	Oz.
PURPLE AND MAROON.		
CHARLES FOSTER. Mauve and pink, shading light purple....	5	20
ROYAL PURPLE. Rich, deep purple.....	5	20
SENATOR. Chocolate, purple and grey striped.....	5	20
MIXED VARIETIES.....	5	20
1 lb. ½ lb. ¼ lb.		
\$2.25 \$1.25 .70		

GRANDIFLORA TYPE.

WHITE.		
BLANCHE BURPEE. Pure white.....	5	10
EMILY HENDERSON. Large white.....	5	10
FLORENCE WRIGHT. Fine pure white.....	5	10
SHASTA. White; very large open form.....	5	10
PRIMROSE, CREAM OR IVORY.		
HON. MRS. E. KENYON. Large primrose yellow.....	5	10
QUEEN VICTORIA. Soft primrose yellow, tinged with bluish	5	10
LIGHT PINK SHADES.		
APPLE BLOSSOM. Rosy pink, blended with light bluish....	5	10
AGNES ECKFORD. Very light soft pink.....	5	10
BLANCHE FERRY. Standards pink, wings white.....	5	10
JANET SCOTT. Soft rosy pink and buff.....	5	10
JEANNIE GORDON. Bright rose, tinted primrose.....	5	10
LOVELY. Deep pink, shading to light pink.....	5	10
PRIMA DONNA. Lovely shade of soft pink.....	5	10
QUEEN OF SPAIN. Buff pink...	5	10

DEEP, BRIGHT PINK.

BOLTON'S PINK. Large orange pink.....	5	10
KATHERINE TRACY. Brilliant pink; large flowering.....	5	10
MISS WILLMOTT. Bright orange pink, shaded rose	5	10

ORANGE AND SALMON.

AURORA. Orange, rose and white.....	5	10
HENRY ECKFORD. Orange scarlet; large flowering	5	10
ROSE DU BARRI. Crimson and orange.....	5	10
SALOPIAN. Deep crimson and orange scarlet.....	5	10

SHADES OF RED.

COCCINEA. Cherry red.....	5	10
KING EDWARD VII. Pure, deep red.....	5	10
PRINCE OF WALES. Bright rose and crimson.....	5	10
QUEEN ALEXANDRA. Deep scarlet; large.....	5	10

EDGED.

DAINTY. White, with pink edge.....	5	10
STELLA MORSE. Deep cream, with bluish-pink edge	5	10

LAVENDER SHADES.

COUNTESS OF CAROGAN. Lilac and blue.....	5	10
COUNTESS OF RANNOR. Pale lavender.....	5	10
LADY GRISEL HAMILTON. Pure lavender.....	5	10
LOTTIE ECKFORD. Lilac, blue and white.....	5	10

SHADES OF BLUE.

CAPTAIN OF THE BLUES. Bright blue and light purple.....	5	10
FLORA NORTON. Bright blue.....	5	10
HELEN PIERCE. Blue with dark markings.....	5	10
LORR NELSON. Deep navy blue; brilliant color...	5	10
MRS. GEORGE HIGGINSON, JR. Delicate azure blue	5	10
NAVY BLUE. Indigo blue and violet.....	5	10

SWEET PEAS (GRANDIFLORA TYPE)—Continued.

PURPLE AND MAROON.		Pkt.	Oz.
BLACK KNIGHT. Deep maroon.....		5	10
DUKE OF WESTMINSTER. Deep purple.....		5	10
MRS. WALTER WRIGHT. Rose purple and mauve.....		5	10
OTHELLO. Dark, glossy maroon.....		5	10
ROMOLA PIAZZANI. Large, light purple.....		5	10

"K. & W." CHOICE MIXED. This magnificent assortment is a mixture of the finest varieties produced, the flowers being of the largest sorts, and so combined as to give the most delightful harmony of colors.

1 lb.	½ lb.	¼ lb.
.85	.50	.30

EARLY FLOWERING OR CHRISTMAS VARIETIES.

EXTRA EARLY BLANCHE FERRY. Carmine and white.....	5	15
LE MARQUIS. Navy blue.....	5	15
MRS. ALEX. WALLACE. Pinkish lavender.....	5	15
MRS. C. H. TOTTY. Lavender.....	5	15
MRS. E. WILDE. Crimson rose.....	5	15
MRS. F. J. DOLANSKEY. Light pink.....	5	15
MONT BLANC. Pure white.....	5	15

1 lb.	½ lb.	¼ lb.
\$1.25	.70	.40

PRICES FOR ANY OF THE ABOVE FIVE-CENT PACKAGES: 6 pkts. for 25c.; 12 pkts. for 40c.

INOCULATE, FOR BEST RESULTS, WITH NITROGEN FIXING BACTERIA.

**PANSY.**

A well-known and universal favorite. Prefers a moist, shady situation; cover during the winter months. Seeds sown in August or September, kept in a cold frame through the winter and planted out in the spring, will blossom the whole season.

CARTER'S PRIZE. Extra choice strain; very large flowers and choice colors..... 15

GIANT FIVE-SPOTTED. Enormous flowers of perfect symmetry; beautifully blotched with the richest deep velvety plum-crimson, bordered with white and various colors.... 15

PANSY—Continued.

	Per Pkt.
CARTER'S PEACOCK. Unique flowers of marvelous beauty, the upper petals being of a beautiful ultra-marine blue, resembling in shade the peacock feather.....	10
GIANT STRIPED. The perfection of all the striped varieties.....	15
GIANT TRIMARDEAU. Mixed.....	10
BUGNOT. A French variety, of large size, beautiful colors, handsome broad blotches, finely penciled with stripes of delicate hue.....	15
KING OF THE BLACKS. Velvety jet black.....	10
ODIER. Finest blotched.....	10
BLUE. Beautiful light blue.....	10
YELLOW. Pure golden yellow.....	10
PURPLE. Dark, rich purple.....	10
WHITE. Pure white; dark eye.....	10
"K. & W." EXTRA CHOICE MIXED. Superb mixture of finest large flowering varieties.....	10
FINE MIXED.....	5

PASSION FLOWER.

A splendid class of climbers, with curious flowers produced in great profusion; fine for conservatory or will answer for the garden, flowering freely during the autumn.

FINE MIXED..... 10

PERILLA NANKINENSIS.

An annual, growing from two to two and one-half feet; stems branching, well covered with an ample foliage of a dark purple, almost black..... 5



PETUNIA.

PETUNIA.

Favorite, hardy annuals, succeeding well in any rich soil. For the brilliancy and variety of their colors, their abundance of flowers and the long duration of their blooming period, they are indispensable in any garden.

DOUBLE FRINGED. Extremely double, edges finely fringed, petals fluted and crinkled, unmatched by crumpled velvet, which the flowers resemble. 25

SINGLE FRINGED. Choicest fringed sorts..... 15

CALIFORNIA GIANTS. A strain of incomparable beauty, size and luxuriance. The flowers are exquisitely ruffled or fringed on the edges, and are enormous..... 25

CARTER'S EMPRESS. Crimson shaded, with lovely penciled throat. Blossoms of grand size and form..... 15

CLEMATIS FLOWERED. Resembling in form the well-known Clematis Jackmanni; dark and light blue..... 15

WHITE. Single, large, pure white..... 5

FINE MIXED. Single varieties..... 5

PHLOX DRUMMONDI.

The flowers are of extreme beauty, and are greatly admired by all. Their long duration in bloom, combined with their almost unequalled richness of color, make them invaluable in the general flower garden. Hardy annuals.

PURE WHITE.....	5
PURE DEEP SCARLET.....	5
ROSE.....	5
YELLOW.....	5
CRIMSON.....	5
FINEST MIXED. Ounce \$1.00..	5



PHLOX.



HEDDEWIG PINK.

PINK.**(*Dianthus*.)**

Per Pkt.

One of the most popular flowers in cultivation, producing a great variety of brilliant colors and profusion of bloom.

HEDDEWIG. Flowers very large, and of rich and brilliant color. Hardy annual... 10

CHINESE. Splendid double mixed 5

CARNATION "MARGUERITE". Very early, and when sown in the spring will bloom in July or August and continue until frost, or may be potted to bloom during the winter in the house. Many of the flowers are double, and are finely fringed and fragrant.

GIANT MIXED. Extra large, flowering profusely, in brightest colors... 10

POPPY.

ADMIRAL POPPY.

Brilliant and showy, hardy annual, growing freely in any garden soil. Sow as early in spring as the weather will permit at intervals for a succession. Barely cover seed; **PRESS DOWN FIRMLY**, and when up thin to six inches apart. 2 ft.

ADMIRAL. Single, peony-flowered variety. Glistening pure white, with scarlet band around the top; very handsome. 10

CARDINAL. Dark foliage, deeply cut; very double flowers. Color vivid scarlet on white ground... 5

MIKADO. Double white, fringed flowers, purple margins... 5

PEACOCK. Cup-shaped, crimson blossoms, with ring of black at the base of the petals; equally good for pots or borders. 10

TULIP. Grows twelve to fourteen inches high, and produces well above the foliage fifty to sixty large flowers of the most brilliant scarlet... 5

WHITE SWAN. The acme of perfection in double poppies. The profusely produced blossoms are perfectly formed, and the purity of their color is beyond reproach... 10

DOUBLE SCARLET.... 5

FINE DOUBLE MIXED.... 5

SHIRLEY. Beautiful strain of single mixed poppies; bright, delicate colors; fine for cutting 5

PORTULACA.

Per Pkt.



PORTULACA.

Very popular, low-growing, hardy annuals, making a most brilliant display in the garden, and very suitable for borders or edgings. Sow early in warm, light, rich soil and thin plants to four inches.

SINGLE CRIMSON... 5
SINGLE SCARLET... 5
SINGLE WHITE... 5
SINGLE YELLOW... 5
SINGLE, ALL COLORS MIXED... 5
DOUBLE FINEST MIXED... 10

PRIMULA. (Chinese Primrose.)

These are beautiful and desirable plants for the parlor and greenhouse, and produce a constant succession of their charming flowers all through the winter and spring. The seeds may be sown at any time from January to July, in pots, using a light soil.

SINENSIS. White fringed... 25
SINENSIS. Crimson... 25
EXTRA FINE MIXED... 25
DOUBLE EXTRA MIXED... 50

PRINCE'S FEATHER.

Ornamental plants, with elegant plumes of rich colored flowers.

LARGE FLOWERED. Crimson; 2 ft. 5

RHODANTHE.

A well-known everlasting; valuable for the decoration of the conservatory and flower garden; fine for bedding or ribboning. The flowers, if gathered when young, make valuable winter bouquets; succeed best in a light, rich soil and a warm, sheltered situation. Half-hardy annual; 1½ ft.

FINE MIXED... 5



RHODANTHE.

RICINUS.**(Castor Bean.)**

Plants with very ornamental foliage and showy fruit and quite a tropical appearance. With other ornamental-leaved plants, they make a most attractive bed on the lawn, and are also desirable when grown as single specimens. Half-hardy annuals.

BARBONENSIS ARBOREUS. Beautiful, large green foliage; 15 ft. 5



RICINUS.

CAMBODGENSIS. Dark foliage; black stem; 9 feet 5

SANGUINEUS. Scarlet fruited; 10 ft. 5

ZANZIBARIENSIS. Immense, dark green foliage; 12 ft. 5

MIXED VARIETIES 5

ROSE CAMPION.

Per Pkt.

The rose campion is perfectly hardy and very easily raised from seed. The flowers are produced on long stems, blooming freely throughout the season.

FINE MIXED 5

RUDBECKIA. (Cone Flower.)

Showy, hardy annual, suitable for borders or clumps among shrubs.

AMPLEXICAULIS. Golden yellow; 3 ft. 5



SALPIGLOSSIS.

SALPIGLOSSIS.

Very beautiful, rich, half-hardy annuals, one and one-half feet high. Start early in the hot-bed and transplant to light, warm, rich soil. Blooms from July to September.

FINE MIXED 10

SALVIA.

Very ornamental, producing tall spikes of brilliant flowers. Start early in hotbeds and transplant two feet apart. Half-hardy annual.

SPLENDENS. Brilliant scarlet flowers 10

GLORY OF STUTTGART. Brilliant scarlet, large bouquet 10

BONFIRE. Early dwarf scarlet 10



SALVIA.

SCHIZANTHUS.

Tender annual, one to one and one-half feet high, blooming from August to October. Fine for pot culture.

FINE MIXED 5

SENSITIVE PLANT.

A pretty, curious annual, being so sensitive that the leaves close together at the slightest touch 5

SMILAX.

A beautiful winter climbing plant, adapted to the conservatory. Nothing can excel this plant in beauty of foliage and orange fragrance of the flower. Extensively used for bouquets and floral decorations of every description 5



STOCKS.

STOCKS.

Half-hardy annual, producing splendid spikes of very rich and beautiful flowers of delightful fragrance. For early flowering sow early in the spring, in pots or in the hot-bed, and transplant one foot apart. Blooms from June until October.

STOCKS—Continued.

Per Pkt.

PRINCESS ALICE (White Perpetual). "Cut and Come Again." Of fine branching habit, growing to the height of eighteen inches. Large, double flowers, of rosette-like form. Fine for forcing 10

"CUT AND COME AGAIN." Finest mixed 10

BEAUTY OF NICE. Handsome winter flowering stock of quick growth, with flowers of large size and very double. Color, daybreak pink. Flowers in from twelve to fifteen weeks from seed-sowing 10

QUEEN ALEXANDRA. Same type as Beauty of Nice, flowers delicate rosy lilac, of great beauty, and of exceptionally high value for cut bloom, market and bouquet work. The percentage of double flowering plants is very large.. 10

SNOWFLAKE. A dwarf variety, with large, double, snow-white flowers; fine for pot culture; very early 10

WHITE. Ten weeks, double 10

PURPLE. Ten weeks, double 10

SCARLET. Ten weeks, double 10

MIXED. Ten weeks, double 10

SUNFLOWER.

Well-known, showy plants; remarkable for their rapid and stately growth and the large size and brilliancy of their flowers.

CALIFORNIA. Double, bright yellow flowers 5

MAMMOTH RUSSIAN. Very large flowers 5

NEW MINIATURE. An improvement on the miniature. Covered with hundreds of brightest orange flowers. The blooms are of a variety of shades, sizes and shapes of petals. 5

SPHENOGYNE.

A very showy, free-blooming plant, with yellow flowers. Very effective for beds or mixed borders. Hardy annual.... 5

SWEET SULTAN.

Showy, hardy annual, one or two feet high, succeeding well in any soil.

FINE MIXED 5

SWEET CLOVER.

Much resembles the common red clover, and valuable for its fragrance 5

TASSEL FLOWER.

A beautiful, half-hardy annual, with small, tassel-like flowers, blooming profusely from July to October.

SCARLET 5

THUNBERGIA.

Very ornamental, trailing, half-hardy annual, admirably adapted for trellis or rustic work, or for the conservatory.

FINE MIXED 10

VERBENA.

Per Pkt.



VERBENA.

Well-known and universally popular bedding plant, blooming all summer. Plants grown from seed are more healthy and make larger and harder plants than those from cuttings. If sown in spring will flower quite early.

CANDIDISSIMA. Pure white.....	10
SCARLET DEFIANCE. Brightest scarlet....	10
MAMMOTH FINEST MIXED.....	10
FINE MIXED.....	5
LEMON. Lemon-scented foliage.....	10

VIOLA ODORATA. (Sweet Violet.)

A charming addition to the garden and highly prized on account of its delicious fragrance. Succeeds best in a sheltered location..... 10

VISCARIA.

Very pretty, profuse-flowering, half-hardy annual, producing a fine effect in beds or mixed borders, and growing readily in any soil.

FINE MIXED..... 5

WALLFLOWER.

Very fragrant and ornamental, suitable for background and amongst shrubbery.

FINE MIXED..... 5

WILD CUCUMBER VINE.

A very rapid-growing climber which reaches a height of fifteen or twenty feet during the season. It is covered with clusters of white, sweet-scented flowers, followed by an abundance of ornamental prickly seed pods. It will quickly cover a trellis, pillar or an unsightly building, and will reproduce itself from self-sown seed every year. Soak seed over night in warm water. Hardy annual..... 5



WHITLAVIA.

WHITLAVIA.

Per Pkt

Charming, hardy annual, with delicate foliage and clusters of beautiful, bell-shaped flowers; fine for ribboning or mixed borders; 1 ft.

FINE MIXED..... 5

ZEAL. (Japanese Maize.)

An ornamental foliage plant. Grows to the height of four or five feet, furnished from the bottom with long, wavy leaves, broadly ribboned with alternate stripes of white and green.

STRIPED..... 5

ZINNIA.

A most splendid class of hardy annuals, and one of the finest summer flowering plants. The flowers are large, handsome, and in a very great variety of colors, blooming throughout the whole season. Start early in pots or under glass and transplant one foot apart.

HAAGEANA. Double, orange; 1 ft.....	5
CURLED AND CRESTED.....	5
DOUBLE GIANT MIXED.....	5



DOUBLE ZINNIA.

WILD GARDEN SEED.

A mixture of over one hundred varieties of flower seeds..... 5

HARDY PERENNIALS AND BIENNIALS.

This class of flowers is coming into increased favor each year. The seed may be sown in the spring, or later in July or August. If sown at the latter time, it is well to sow in a shaded, moist place, or to keep the ground shaded and well watered until the seed appears.

ALYSSUM.

Per Pkt.

SAXATILE COMPACTA. Grows about nine inches high, producing a mass of golden yellow flowers..... 5

AQUILEGIA. (Columbine.)

Grows about two feet high, blooming in May or June. MIXED..... 5



DOUBLE DAISY.

BELLIS PERENNIS. (Double Daisy.)

Fine for bordering. Set six inches apart.

WHITE.....	10
RED.....	10
MIXED.....	10



CANTERBURY BELLS.

CANTERBURY BELLS.

Per Pkt.

Large, bell-shaped flowers, blooming in July. Grows two feet high.

BLUE.....	10
WHITE.....	10
MIXED.....	10

DIGITALIS. (Foxglove.)

This is a very ornamental biennial plant, almost three feet high. The racemes of thimble-shaped flowers are often two feet long.

GLOXINIEAFLORA. Mixed. Spotted flower..... 5

DELPHINIUM. (Larkspur.)

One of the finest perennials, growing four feet high, and lasting a long time in flower.

FORMOSUM. Blue with white eye..... 5

DIANTHUS. (Pink.)

Per Pkt.

CARNATION. A magnificent class of popular flowers, very fragrant, and of rich and beautiful colors. Hardy perennial..... 10

GYPSOPHILIA. (Baby's Breath.)

Delicate, mist-like flowers. Fine for bouquets. Grows two feet high.

PANICULATA. White. Blooms the first year, if sown early.. 5



FORGET-ME-NOT.

HOLLYHOCK.

Showy perennials, about four to five feet high.

DOUBLE MIXED. Extra choice..... 10

DOUBLE FINE MIXED...... 5

SINGLE MIXED...... 5

MYOSOTES. (Forget-Me-Not.)

Low-growing plants, preferring moist, shady places.

VICTORIA. Dwarf, sky blue.. 5

MIXED..... 5



HOLLYHOCK.

HONESTY.

A hardy biennial, two feet high, flowering the second year in May and June. The flowers are succeeded by singular semi-transparent seed vessels that are quite ornamental and may be kept for a long time..... 5

PERENNIAL PHLOX.

One of the most beautiful of the perennials, growing two three feet high, with large heads of flowers..... 10

PERENNIAL POPPY.

ICELAND. Blooms the first year from seed. Colors range from white to orange..... 5

ORIENTAL. Very large bright scarlet flowers. Fine for borders and amongst shrubbery..... 10

POLYANTHUS.

Grows about one foot high, blooming in June and July... 10

SHASTA DAISY.

A hardy perennial, lasting in bloom for a long time. Flowers are white, and from one to four inches across..... 10



SWEET WILLIAM.

SWEET WILLIAM.

Per Pkt.

One of the most showy of the perennials, bearing large trusses of flowers.

WHITE..... 5

PINK..... 5

CRIMSON..... 5

MIXED..... 5

SWEET ROCKET.

An early flowering perennial, about eighteen inches high, with fragrant purple and white flowers..... 5

EVERLASTINGS.

Page

These are flowers whose blossoms, if gathered when first opened and dried in shade, will keep bright for months.

ACROLINIUM..... 4

AMMOBIUM..... 4

GLCBE AMARANTH..... 7

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CLIMBERS.

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GOURDS..... 7

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NASTURTIUM..... 10

PASSION FLOWER..... 12

SWEET PEAS..... 10-12

THUNBERGIA..... 14

WILD CUCUMBER..... 14

SWEET AND MEDICINAL HERBS.

Sow in spring, in shallow drills, one foot apart and when well up thin out or transplant to a proper distance apart.

	Pkt.	Oz.		Pkt.	Oz.		Pkt.	Oz.
Anise. Annual.....	.05	.15	Fennel, Sweet. Perennial..	.05	.10	Rue. Perennial.....	.05	.15
Balm. Perennial.....	.05	.25	Horehound. Perennial.....	.05	.25	Saffron. Annual.....	.05	.10
Basil, Sweet. Annual.....	.05	.15	Hyssop. Perennial.....	.05	.25	Sage. Annual.....	.05	.15
Caraway. Biennial.....	.05	.10	Lavender. Perennial.....	.05	.15	Summer Savory. Annual..	.05	.15
Catnip. Perennial.....	.10		Marjoram, Sweet. Annual	.05	.15	Thyme. Perennial.....	.05	.25
Coriander. Annual.....	.05	.10	Mint.....	.10		Wormwood. Perennial.....	.05	.25
Dill. Biennial.....	.05	.10						

SPECIAL \$1.00 OFFER

CONSISTING OF

30-5c. Pkts., or 15-10c. Pkts.

Packages may be selected by the purchaser from any varieties (both flower and vegetable seeds) found in our catalog, and same will be sent by mail, on receipt of price (ounce packages NOT included).



A GENERAL LIST OF Vegetable Seeds



We forward seeds by **Mail, Express or Freight** as the purchaser may wish. When ordered by mail, add postage for beans, corn and peas at the rate of six cents per pound to catalog prices, and for larger shipments by mail, see Parcel Post rates on page 3 of this catalog.

ASPARAGUS.

Sow early in May, thinly, in rows one inch deep and two feet apart. The next season plant in drills two inches deep and two feet apart, spreading the roots well out in ground thoroughly manured and trenched, at least two feet deep.

One ounce will produce about 200 plants; 4 to 5 pounds to the acre.

Early Giant Argenteuil. Pkt. Oz. ¼ lb. Lb.

This variety has thus far been free from rust; valuable on account of earliness; produces an even growth, is of large size, and superb flavor

.05 .10 .30 \$1.00

Conover's Colossal.

Large and productive; a very desirable variety

.05 .10 .25 .75

Palmetto. Early, prolific and uniformly of large growth

.05 .10 .25 .75

Conover's Colossal

Roots. Two years old, per 100, \$1.50.



ASPARAGUS.

BEANS—Dwarf or Bush.

A succession of sowings can be made from the first week in May until August. Plant in drills about two inches deep, and from eighteen inches to two feet apart, according to the richness of the soil; the poorer the soil the closer they can be planted; the plants should be about three inches apart.

Two pounds are sufficient for 100 feet of drill; 90 pounds for one acre in drills.

Beans ordered by mail are subject to an extra charge of six cents per pound for postage. For larger shipments by mail, see rates on page 3 of this catalog.

Green-Podded Varieties.

Broad Windsor. (English beans.) Plant as early in the spring as the ground can be worked, from two to four inches apart, in drills from twenty-four to thirty inches apart. As soon as the plants are in full blossom, and the lower pods begin to set, pinch off the tops; this will insure the filling of the pods and hasten the maturity of the seed.

1 lb. 2 lbs. 15 lbs

.30 .50

Burpee's Bush Lima. The only bush form of the true large Lima bean. The plants grow eighteen to twenty inches high. Is an immense yielder of handsome, large pods, well filled with very large beans, which are identical in size and luscious flavor to the well known large pole Lima.

.35 .60

Burpee's Stringless Green Pod. Very early. Pods four and a half to five and a half inches long, nearly round, slightly curved, light green in color, flesh tender and of the best quality

.35 .60 \$4.25

Bountiful. Early market variety. Pods grow to large size, are broad and fleshy, cook tender and fine quality.

.35 .60 4.00

Prices subject to change without notice. (See note on inside first cover.)

BEANS—Continued.

Dwarf Horticultural. Pods of medium length, slightly curved, and when nearly developed are freely splashed with bright red on the yellow skin. The green shell beans are of good size, tender and of fine flavor.

1 lb.	2 lbs.	15 lbs.
.35	.60	\$4.25

Goddard, or Boston Favorite. A larger, later Dwarf Horticultural type.

1 lb.	2 lbs.	15 lbs.
.35	.60	\$4.00

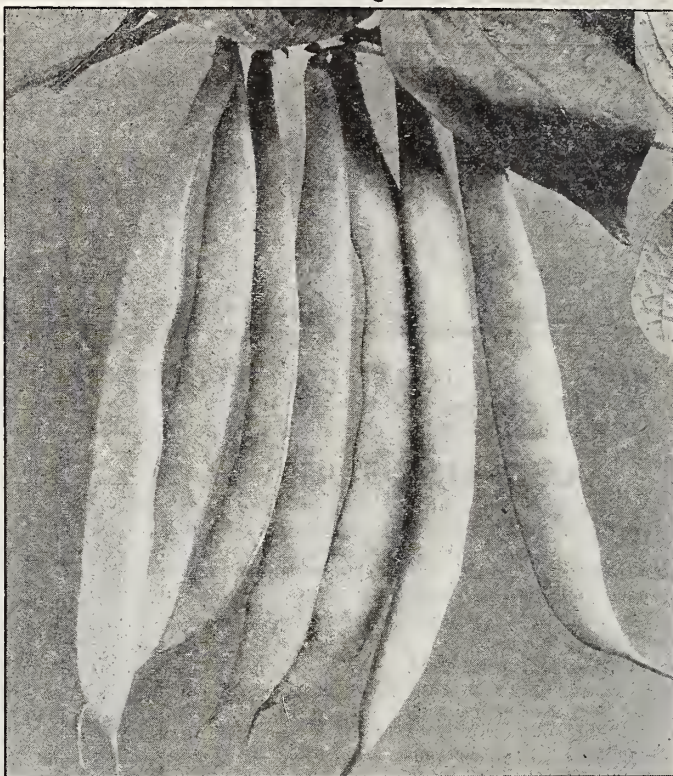
Low's Champion. Early, hardy, thrifty and enormously productive; combines extreme tenderness and delicious flavor, being absolutely without strings to the pods, and excels many other varieties as a snap or string bean. As a shell bean it has but few equals, and is of splendid flavor when cooked dry.

1 lb.	2 lbs.	15 lbs.
.30	.50	\$3.50

Long Yellow Six Weeks.

Early, pods long, flat and full. Mostly grown for market.

1 lb.	2 lbs.	15 lbs.
.35	.60	\$4.00

**GREEN PODDED BUSH BEANS.**

Improved Refugee. (1000 to 1.) Of true bush growth, fifteen inches in height, branching freely. The pods are nearly round, light green, five inches long, tapering to a slender point; extremely prolific.

1 lb.	2 lbs.	15 lbs.
.30	.50	\$3.25

Red Valentine. The pods are very fleshy, round and saddle-backed, with only slight strings. Bushes grow uniformly about fifteen inches in height and produce a large crop.

1 lb.	2 lbs.	15 lbs.
.30	.50	\$3.50

Wax or Yellow-Podded Varieties.

Brittle Wax. One of the earliest wax beans. Pods fleshy, entirely stringless, and of fine quality. Very hardy and prolific.

1 lb.	2 lbs.	15 lbs.
.40	.70	\$5.00

Black Wax. Pods yellow; a superior snap bean.

1 lb.	2 lbs.	15 lbs.
.40	.70	\$5.00

Currie's Rust-Proof Wax. Pods long, flat, tender and of fine quality.

1 lb.	2 lbs.	15 lbs.
.40	.70	\$5.00

**WAX PODDED BUSH BEANS.**

Prices subject to change without notice. (See note on inside first cover.)

BEANS—Continued.

	1 lb.	2 lbs.	15 lbs.
Golden Wax, Improved. A medium early and heavy cropper, on vines of vigorous, bushy growth. The pods are golden yellow, fleshy and solid, brittle, wavy texture; excellent for home and market garden.....	.40	.70	\$5.00
Golden Wax, Keeney's Rustless. A superior market garden variety. Large, flat, golden yellow and very fleshy pod. It has an excellent flavor and shows almost no tendency to rust.....	.40	.70	5.00
Hardy Wax. Vines are of strong, vigorous growth, producing a heavy crop of long, handsome yellow pods; of excellent quality, and is very prolific.....	.40	.70	5.00
Sure-Crop Stringless Wax. A valuable variety which, while not related to the well-known Currie's Rust-proof Wax, bears a great resemblance to it in plant, pod and bean, but is of much better quality. The plant is strong and holds the pods well off the ground and it will stand long seasons of wet weather.....	.40	.70	5.00
Wardwell's Kidney Wax. Hardy and vigorous vine, producing a heavy crop of handsome yellow pods, stringless and brittle. Beans large, kidney shaped.....	.40	.70	5.00
White Wax. Pods and seeds white and of rich flavor ..	.40	.70	5.00

Field Varieties.

	1 lb.	2 lbs.	
Kidney, Red. Excellent as a shell bean and for baking.....	.11b	2 lbs.	
Kidney, White. Seed white, smaller than the red variety. Very prolific; fine for baking.....	.20	.35	
Snowflake Pea. A decided improvement on the common pea bean. Productive and very early.....			Prices for larger quantities quoted on application.
Sulphur Pea. Larger than the white pea bean; golden yellow color; early and of fine quality.....			
Yellow Eye. (Improved.) Heavy yielder; fine quality.....			
Yellow Eye. (Old-fashioned type.) Very prolific; fine for baking.....			

BEANS—Pole or Running.

The planting of the various sorts of pole beans should be delayed a week or more after the first planting of the early dwarf sorts. They succeed best in sandy loam, which should be liberally enriched with short manure in the hills, which are formed, according to the variety, from three to four feet apart; from five to six seeds are planted in each hill, about two inches deep.

Two pounds will plant 150 hills; 20 to 24 pounds to the acre.

	1 lb.	2 lbs.	15 lbs.
Kentucky Wonder. Very productive, and of fine quality. Entirely stringless pods, of a silvery green color.....	.35	.65	\$4.25
King Horticultural. An early, robust grower, the pods being large, stringless, and bright carmine. Tender and of delicious flavor.....	.35	.65	4.25
Lazy Wife's. Abundantly productive, and of excellent flavor, with long, green, fleshy and stringless pods.....	.35	.65	4.25
Lima, Large. A large, late variety of excellent flavor.....	.35	.65	4.25
Lima, Small. Earlier and hardier than the preceding.....	.35	.65	4.25
London Horticultural. An old favorite. Very productive and excellent as a snap or shell bean.....	.35	.65	4.25
White Case Knife. Good green-podded variety.....	.35	.65	4.25

FLOWERING BEANS.

Valuable for use on trellises and arbors, being highly ornamental and free climbers; plants are of strong, quick growth, bearing large sprays of handsome flowers.

	Pkt.	Qt.
Scarlet Runner. Very ornamental, bright scarlet flowers.....	.10	.50
White Runner. Similar to above, flowers being white.....	.10	.50

ALL BEANS—INOCULATE, FOR BEST RESULTS, WITH NITROGEN FIXING BACTERIA.

BEET.

The best results are obtained on a deep, rich, sandy loam. For early use sow as soon as the ground will admit, in drills fourteen inches apart, and thin to four inches; for the main crop, sow the first week in May, and for winter use as late as June. The soil should be deeply manured and well cultivated. In lifting and storing the roots, care must be taken that they are not bruised.

One ounce to 50 feet of drill; 6 pounds to the acre.

	Pkt.	Oz.	¼ lb.	Lb.
CRIMSON GLOBE. Remarkable for its smooth skin and fine shape. Is a second early variety, does not grow large and coarse, the matured beets being medium in size. The flesh and skin are both very dark and of fine quality, being sweet and tender. The tops are small and dark in color.....	.05	.15	.45	\$1.50
Crosby's Egyptian. An improved strain of the Egyptian beet.....	.05	.15	.50	1.75
DETROIT DARK RED. Similar in shape to the Dewing's, of dark red color, with small tops. A favorite with market gardeners.....	.05	.15	.50	1.75
Dewing's Blood Turnip. Of fine form and flavor, blood red. A desirable variety.....	.05	.10	.40	1.35

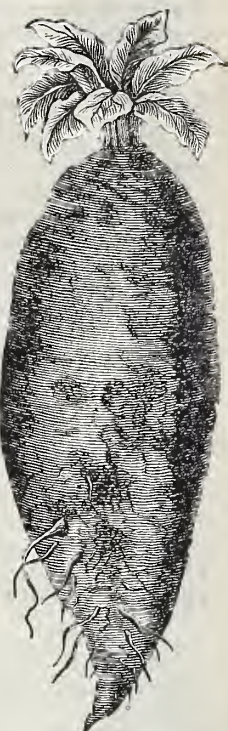
Prices subject to change without notice. (See note on inside first cover.)

BEET—Continued.

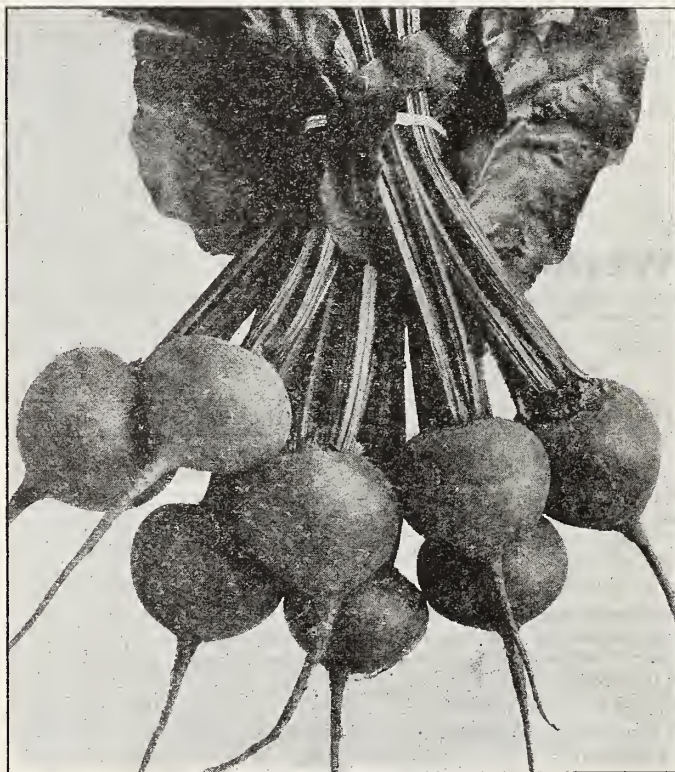
	Pkt.	Oz.	¼ lb.	Lb.
Dirigo Extra Early. A rich, blood-red beet of fine grain and flavor, earlier than the Egyptian or the Eclipse.....	.05	.15	.45	\$1.50
Eclipse. This variety is about as early as the Egyptian, but larger and of finer quality; color, dark crimson .....	.05	.15	.45	1.50
Edmand's Early Turnip. A variety of handsome round shape. The skin is deep blood red in color, the flesh very dark and exceedingly sweet and tender in quality .....	.05	.10	.40	1.35
Egyptian Blood Turnip. Very early and of rapid growth; color, deep crimson; of excellent quality .....	.05	.15	.45	1.50
Swiss Chard (Lucullus). The leaves of Swiss chard are used as greens, cooked in the same manner as spinach, and the large ribs are prepared like asparagus, in which manuer they are delicious. The "Lucullus" is the largest and best variety of Swiss chard .....	.05	.15	.45	1.50

Varieties grown for feeding stock. Sow in May or June—5 pounds per acre.

	Pkt.	¼ lb.	Lb.
Allen's Mammoth Long Red Mangel Wurzel. A variety producing roots of mammoth size .....	.05	.35	\$1.25
Golden Tankard Mangel Wurzel. Bright yellow; very productive .....	.05	.45	1.50
Norbiton Giant Mangel Wurzel. Extra fine long red; very large .....	.05	.35	1.25
Yellow Globe Mangel Wurzel. Roots of large size and globular form; very productive .....	.05	.35	1.25
Lane's Imperial Sugar. A greatly improved variety of the White French Sugar .....	.05	.30	1.00
White French Sugar. Largely cultivated for feeding stock...	.05	.25	.90



**ALLEN'S MAMMOTH
LONG RED MANGEL
WURZEL.**



DETROIT DARK RED BEET.

BROCCOLI.

Broccoli is nearly allied to the cauliflower, and may be regarded as a variety of that delicious vegetable. It is hardy and sure to head, but inferior in flavor.

One ounce of seed will produce about 2,000 plants.

	Pkt.	Oz.
Purple Cape. Heads greenish purple; medium size and compact..	.05	.50
White Cape. Large, creamy-white; sure to head; standard sort...	.05	.50

**BRUSSELS
SPROUTS.**

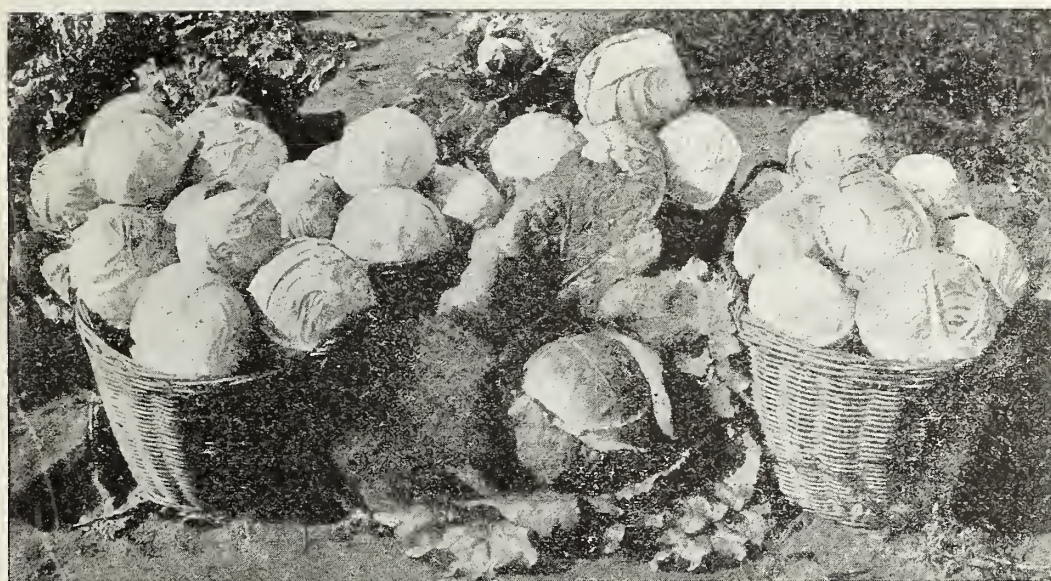
A species of the cabbage family, producing along the whole length of the stem small sprouts resembling miniature cabbages. These heads are a great delicacy boiled in the same way as cauliflower. Seed should be sown about the middle of May in a seed bed, and the plants afterwards set out in rows two feet apart and cultivated and managed as winter cabbage.

One ounce will produce about 2,500 plants.

	Pkt.	Oz.	¼ lb.
Improved Long Island. A variety of excellent quality.	.05	.20	.75

Prices subject to change without notice. (See note on inside first cover.)

CABBAGE.



The cabbage is one of the most important vegetables, and some of its varieties are universally cultivated. The ground must be highly manured, deeply dug or ploughed, and thoroughly worked, to insure good, full-sized heads. A heavy, moist and fresh loam is the most suitable. The early sorts should be sown very early in the spring, in hotbeds, or later in the open ground. Eighteen inches by three feet apart is the common distance.

One ounce will produce about 3,000 plants; 4 to 5 ounces to the acre.

	Pkt.	Oz.	¼ lb.
All Seasons. Larger than Henderson's Early Summer, nearly as early; very solid and sure heading.....	.10	\$1.00	\$3.50
Charleston Wakefield. Resembles the Jersey Wakefield, heads larger and more uniform.....	.10	1.25	4.00
Columbia. Very early and compact. Is hardy and vigorous; produces splendid solid heads, of marketable size, and is recommended as one of the most desirable summer varieties.....	.10	1.00	3.50
COPENHAGEN MARKET. One of the best large, round head, early cabbages in cultivation, the type being thoroughly fixed and nearly all the heads maturing at the same time. The plant is short-stemmed; heads set near the ground, are very solid, with a small core, and of fine quality. One of the very best early cabbages for market gardeners.....	.10	1.60	5.50
Danish Ball Head. (Imported.) Heads round and solid. A good winter variety.....	.10	1.00	3.75
DANISH BALL HEAD. (Cape Elizabeth grown.) A valuable, round, solid winter variety. Is a long keeper, and profitable for shipping, keeping long after other sorts have gone ...	.10	1.15	4.00
DANISH EARLY SUMMER. The heads of this cabbage are of a splendid shape and ready early in the season. It is very early, large, firm and heavy.....	.10	1.15	4.00
Early Jersey Wakefield. A standard early variety for home use or market.....	.10	1.00	3.50
Early Winningstadt. An excellent sort; heads of large size.....	.10	1.00	3.00
Fottler's Improved Brunswick. An excellent early Drumhead variety; produces a firm and solid head.....	.10	1.00	3.00
Henderson's Early Summer. One of the earliest of large cabbages, coming in but a few days later than the Wakefield; heads of large size, very solid and compact.....	.10	1.00	3.50
Henderson's Succession. An excellent second early or late sort.....	.10	1.00	3.00
Improved American Savoy. Very sweet and tender; good-sized, firm heads; very reliable and much esteemed for family use.....	.10	1.00	3.00
Marblehead Mammoth Drumhead. The largest variety of Drumheads.....	.10	1.00	3.00
Mammoth Red Rock. Used almost exclusively for pickling.....	.10	1.00	3.00
Pe-Tsal (Chinese Cabbage). Grows similar to Cos lettuce.....	.10	1.00	3.00
Premium Flat Dutch. A standard late variety.....	.10	.60	2.00
Stone-Mason Drumhead. One of the best for a main crop.....	.10	.60	2.00

Prices subject to change without notice. (See note on inside first cover.)

CARROT.

Carrots require a very finely pulverized soil to grow them to perfection. A good, light and well-enriched sandy loam is the best for this crop. For field culture, sow in drills, three to three and one-half feet apart, and for table use sow the smaller varieties in rows sixteen to eighteen inches apart. For early crops, cover one-half an inch deep, and thin to three inches apart in the rows; for late, cover three-fourths of an inch deep, and thin to four inches.

One ounce to 100 feet of drill; 3 to 4 pounds to the acre.

Chantenay. A choice variety; longer than the Scarlet Horn, and a little broader at the top	Pkt.	Oz.	¼ lb.	Lb.
	.05	.15	.45	\$1.50

Danver's Half Long. In form it is midway between the Long Orange and Scarlet Horn. The root is of a rich, dark orange color and grows very smooth. Very productive and keeps well	Pkt.	Oz.	¼ lb.	Lb.
	.05	.15	.45	1.50

Early French Forcing. The earliest variety; valuable for forcing	Pkt.	Oz.	¼ lb.	Lb.
	.05	.15	.45	1.50

EARLY MARKET. A thick, stump-rooted early variety of brilliant color, broad at the top, gradually getting smaller towards the root, which is blunt. An excellent market sort	Pkt.	Oz.	¼ lb.	Lb.
	.05	.15	.45	1.50

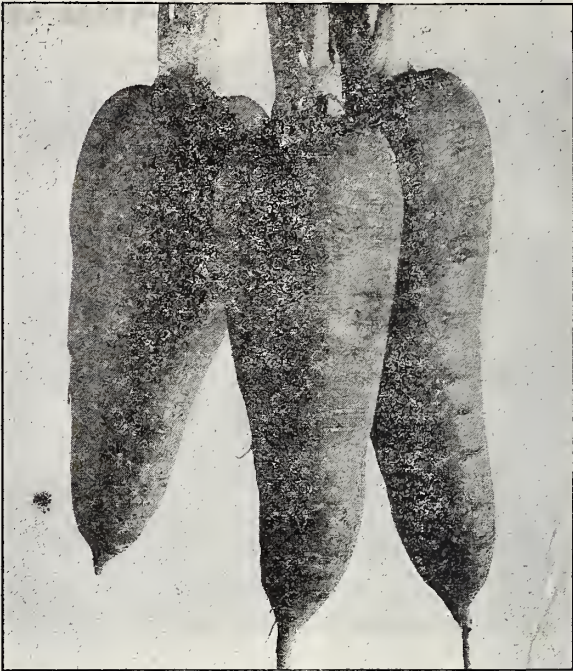
Early Scarlet Horn. Fine grain, medium size. An excellent table sort	Pkt.	Oz.	¼ lb.	Lb.
	.05	.15	.45	1.50

Improved Long Orange. The best late variety. Roots of large size, heavy cropper; an excellent keeper	Pkt.	Oz.	¼ lb.	Lb.
	.05	.10	.35	1.25

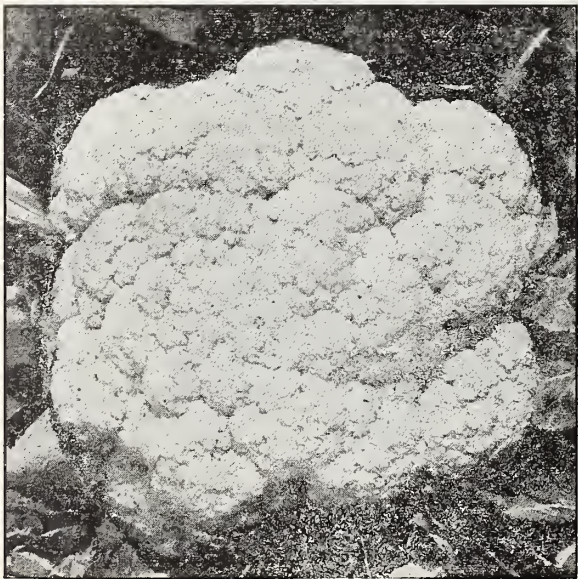
Large White Belgian. Large, long-rooted variety; valuable for feeding stock....	Pkt.	Oz.	¼ lb.	Lb.
	.05	.10	.35	1.25

Nantes. Early, roots almost cylindrical, very smooth and grows about six inches long; the flesh is entirely red, very sweet, and almost entirely without a core	Pkt.	Oz.	¼ lb.	Lb.
	.05	.15	.45	1.50

Oxheart. Very thick and short, fine grained and sweet	Pkt.	Oz.	¼ lb.	Lb.
	.05	.15	.45	1.50



DANVER'S HALF LONG CARROT.



GILT EDGE CAULIFLOWER.

CAULIFLOWER.

Any soil that will grow early cabbages will grow cauliflower, as their requirements are almost similar, but as the product is more valuable, extra manuring and preparation of the soil will be well repaid. The seeds may be sown in the hotbed in March or April, and transplanted to open ground about the first of May.

One ounce will produce about 2,500 plants.

Carter's Autumn Giant. A large late variety	Pkt.	Oz.
	.10	.75

Carter's Dwarf Mammoth. A hardy variety, of dwarf and compact habit, with a firm white head; stands dry weather	Pkt.	Oz.
	.10	.75

Extra Early Dwarf Erfurt. The earliest variety; large, compact heads, of fine quality	Pkt.	Oz.
	.15	2.25

GILT EDGE. Large, heavy sort; one of the best and surest of all the sorts now in cultivation	Pkt.	Oz.
	.15	2.50

Henderson's Early Snowball. One of the best early sorts. Very reliable and grown largely for the market	Pkt.	Oz.
	.15	2.25

Prices subject to change without notice. (See note on inside first cover.)



GOLDEN SELF-BLANCHING CELERY.

CELERY.

To have celery early it should be sown in a hotbed, quite early in the spring, and when three inches high plant out in a well-prepared bed, which must be covered in frosty weather. For the principal crop sow early in the spring, very shallow in the seed bed, and when the plants are about six inches high transplant them six inches apart into trenches for blanching. Dig the trenches four feet apart, a foot wide and ten inches deep. Fill in five or six inches of well-rotted manure, and mix thoroughly half a spade deep with the earth at the bottom. The tops of the plants should be shortened before they are set. Earth up to blanch three or four times during their growth, taking care that no earth falls in the center of the plant.

One ounce of seed produces about 4,000 plants.

<i>Boston Market.</i>	Pkt.	Oz.	¼ lb.	Lb.
A favorite variety, remarkable for its tender, crisp and succulent stems, and its peculiarly mild flavor; keeps well.....	.05	.15	.45	\$1.50

Giant Pascal. An easily blanching variety; superior for late use.....	.05	.15	.45	1.50
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GOLDEN SELF-BLANCH- ING. A fine, solid variety of a beautiful waxy, golden color ; very thick stalks of excellent flavor ; growth close, compact and of medium height.....	.10	.35	\$1.15	4.00
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Henderson's White Plume.				
Crisp, solid and possessing a sweet, nutty flavor; requires very little labor in blanching. Very early and handsome05	.20	.60	2.00

Winter Queen. An excellent winter keeper, recommended especially to market gardeners. Grows a thick stalk and has a large heart. The color is creamy-white and very attractive.....	.05	.15	.45	1.50
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Soup Celery. (Not for sowing.)	Used for flavoring pickles, soups, etc.05	.10	.30
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CHARD—Swiss (or Spinach Beet).

Swiss chard is sometimes called Sea Kale Beet. After once having used Swiss chard for greens we believe your garden will always have at least a row of it, for it is delicious. The leaves are used as greens, and served like spinach. The mid-ribs may be cooked like asparagus. Cuttings may be made all summer, as it can be cut down to the ground and new shoots will soon spring up and make fast growth.

Lucullus. Largest and best variety05	.15	.45	1.50
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CHERVIL.

Curled Chervil. An aromatic sweet herb. The young leaves are used in soups and	Pkt.	Oz.	¼ lb.
salads. Sow thinly in May, in drills half an inch deep, one foot apart.....	.05	.25	.85

CHICORY.

One ounce to 100 feet of drill.

Large Rooted. Used to mix with or as a substitute for coffee. The roots are taken up, washed, cut in small pieces and carefully dried before being used. Cultivation same as the carrot05	.35	1.25
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CORN—Sweet.

The sweet or sugar varieties, being liable to rot in cold, wet ground, should not be planted before the middle of May, and for a succession continue planting every two weeks until July, in rich, well manured ground, in hills three feet apart each way, covering about an inch, and thin out to three plants to a hill, or plant in rows four feet apart, and to stand eight inches apart in the rows.

One pound to 125 hills; 20 pounds to an acre.

Corn ordered by mail is subject to an extra charge of six cents per pound for postage. For larger shipments by mail, see rates on page 3 of this catalog.

Prices subject to change without notice. (See note on inside first cover.)

CORN—Continued.

Early Varieties.

Burbank's Early. As early as the Cory. Has a pure white cob, with a cream-white kernel

1 lb.	2 lbs.	12½ lbs.
.25	.45	\$2.75

EARLY MAYFLOWER. The earliest variety yet produced, being from seven to ten days earlier than the Cory. Is a perfectly white corn, eight, ten and twelve rowed, very productive, and for so early a variety, is of excellent quality

.25	.45	2.75
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"K. & W." EXTRA EARLY CROSBY. The best early strain of the Crosby variety, sweet and of fine flavor. Dwarf, with ears set low, averaging from sixteen to eighteen rows. An excellent market variety, and largely grown for canning. The seed offered is from finest stock of our own selection

.35	.60	4.25
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Early Crosby. Similar to the above, the stalks being taller and heavier; nearly ten days later

.25	.45	2.75
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Early White Mexican. As sweet and delicious as Black Mexican, handsome in appearance and as early as White Cory. Stalks four and one-half feet high. Ears eight inches long, usually eight rowed. Superior in quality to any early variety of equal size.

.25	.45	2.75
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Golden Bantam. An early variety. The ears are medium size, but thickly set with delicious yellow kernels. The quality of this variety is superb, and



GOLDEN BANTAM SWEET CORN.

it has become a general favorite sweet corn with all who have tried it. Golden Bantam has a flavor distinct from other sorts, and if you have never tried it in your garden you should plant it this year. Never mind if the color is yellow, the rich nut-quality is there

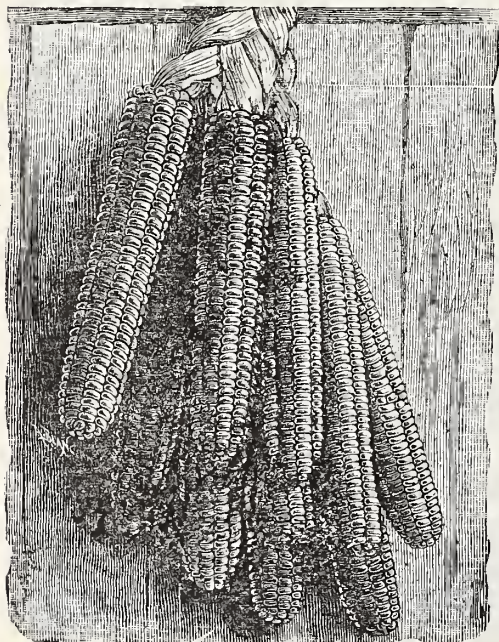
.30	.50	3.25
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Mammoth White Cory. The ears are very large for so early a variety. The stalks are about four feet high, each generally bearing two large, finely shaped ears which become fit for use as early as those of any variety. They are twelve rowed, six to seven inches long, very symmetrical and handsome. The grain is large, broad, very white and of remarkably good quality for such an early sort

.25	.45	2.75
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PEEP O'DAY. One of the first to mature. Stalks from three and one-half to four and one-half feet in height, with from two to three ears each. Small, white cob, with tender kernel

.25	.45	2.75
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EARLY YELLOW FIELD CORN.

Prices subject to change without notice. (See note on inside first cover.)

CORN—Continued.

Medium and Late Varieties.

	1 lb.	2 lbs.	12½ lbs.
Country Gentleman. Medium early and productive.....	.25	.45	\$2.75
Golden Evergreen. Similar in appearance to the Golden Bantam, having a much larger kernel, but about a week or ten days later. This variety has a longer and much larger ear than the Bantam, and has the same sweetness and flavor .....	.25	.45	2.75
Potter's Excelsior. Twelve rowed, very sweet and tender .....	.20	.35	2.60
Seymour's Sweet-Orange. Is a most desirable second early or mid-season variety, growing vigorously from five to six feet in height, and producing an average of two good ears to a stalk. The ears are ready for use a few days later than those of Golden Bantam, and are from six to seven inches in length, with twelve to fourteen rows of deep, rather slender grains of a light canary yellow .....	.30	.50	3.25
Stowell's Evergreen. A late variety of excellent quality, remaining longer in the green state than any other kind .....	.20	.35	2.60

FIELD AND ENSILAGE CORN.

(56 pounds to the bushel.)

Early Sanford (Ensilage). Very early; ears white; excellent for fodder and ensilage....	Price quoted on applica- tion.
Early Yellow Canada. The variety most widely grown in northern New England. An early eight-rowed flint corn with handsome ears and comparatively small cobs, filled to the tips with large, broad kernels.....	
Improved Leaming (Ensilage.) An early, very productive variety. One of the best for ensilage; profitable as a green fodder.....	
Longfellow. A fine field variety, similar to Yellow Canada, having very long ears, small cob, and large kernel.....	
Red Cob (Ensilage). A pure white corn. Is tender and juicy, has short joints, and grows to a great height, with an abundance of leaves.....	
SWEEPSTAKES PEDIGREE (Ensilage). This corn is grown for seed purposes by careful and reliable growers in Central Pennsylvania on soils specially adapted to produce the highest quality and germination. It is well adapted to all conditions of climate and soils from practical tests over the Middle and Eastern States, Ontario and the Northwest, thereby proving its value over many varieties for purpose of feeding.....	

CRESS (Peppergrass).

A well-known salad. Requires to be sown thickly and covered very slightly. Sow at frequent intervals to keep up a succession, as it soon runs to seed.

One ounce will sow about 100 feet of drill.

	Pkt.	Oz.	¼ lb.	Lb.
Extra Curled. Very fine; may be cut two or three times.....	.05	.15	.35	
Water Cress. A hardy perennial aquatic plant, growing in water along the margins of streams .....	.10	.60	\$2.00	

CUCUMBER.

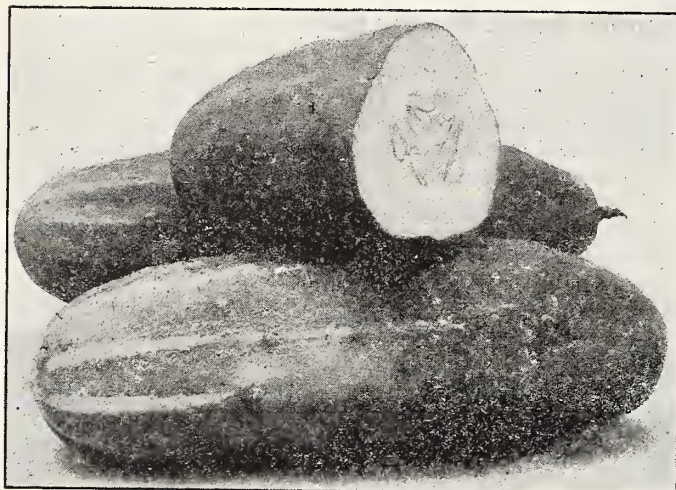
The cucumber is a tender annual, and therefore should not be planted or set out in the open air until there is a prospect of continued warm and pleasant weather. Cucumbers succeed best in warm, moist, rich, loamy ground. The hills should be four or five feet apart in each direction. When all danger from insects is passed, leave but three or four of the strongest plants in the hill.

One ounce to 50 hills; 2 pounds to the acre.

	Pkt.	Oz.	¼ lb.	Lb.
ARLINGTON WHITE SPINE. (For forcing.) Is one of superior quality for forcing. Color dark green, with little of the White Spine showing; is extra long. Fruit grows very even in size and regular in form. Equally good for outdoor planting....	.10	.20	.60	\$2.00
Boston Pickling. The finest variety to grow for pickles; yields large crops; short, straight and dark green .....	.05	.10	.30	1.00
Cumberland. A variety of the Improved White Spine type. Is a splendid table sort, and excellent for pickling. Color, deep green, with white tip; flesh firm; very crisp and tender .....	.05	.15	.40	1.25
DAVIS PERFECT. The cucumbers grow long and slim, sometimes measuring twelve inches in length. The color is a rich, dark, glossy green, which they hold until nearly ripe. Very tender and of fine flavor.....	.10	.15	.50	1.50

Prices subject to change without notice. (See note on inside first cover.)

CUCUMBER—Continued.



IMPROVED WHITE SPINE CUCUMBER.

- Improved White Spine.** Superior for table use; very productive; medium size, straight and well formed05 .15 .40 \$1.25
- Japanese Climbing.** Quick, strong growing vines, which may be trained upon a trellis or poles. Fruit from twelve to sixteen inches in length, skin dark green, flesh pure white, crisp and of fine flavor05 .15 .40 1.25
- Lemon.** A distinct type; nearly round, with the yellow and green markings and smooth skin of the lemon, while flesh is exceedingly tender, crisp and sweet.10 .15 .50 1.50
- Long Green.** Long and crisp; a popular and reliable variety for pickling..... .05 .15 .40 1.25
- Short Green.** Similar to Early Frame..... .05 .10 .30 1.00
- West India Gherkin.** Small prickly variety; grown exclusively for pickling10 .20 .60 2.00

DANDELION.

A hardy perennial plant, with broad thick leaves, affording one of the earliest as well as one of the most healthful of spring greens. Sow as early as the weather will permit, in good, well-enriched soil, in rows twelve inches apart, covering seed one-fourth of an inch deep, the earth firmly pressed over the seed.

One ounce to 150 feet of drill; 1 pound will sow an acre.

- Improved French Thick-Leaved.** The best variety Pkt. Oz. ¼ lb. .10 .60 \$2.25

EGG PLANT.

The egg plant will thrive well in any good garden soil. Sow in the hotbed and when two or three inches high prick out into pots, or rows two and one-half to three inches apart. When the weather will permit, transplant into good, rich soil, thirty inches apart each way. One ounce will produce 1,000 plants.

- Early Long Purple.** Earliest and hardiest; very productive. Fruit long and of good quality; 6 to 10 inches long.... Pkt. Oz. .10 .50
- New York Improved Large Purple.** This variety is most largely grown and produces the fruit in great quantities, the plants bearing from 6 to 8 each. They are large, nearly round, dark purple and of excellent quality..... .10 .50
- Pearl.** White; choice for ornamental work10 .50



DANDELION.

Early Frame. An early standard variety, about five inches long.

Pkt.	Oz.	¼ lb.	Lb.
.05	.10	.30	\$1.00

Early Fortune. A prime favorite with market growers because of its extra earliness and the fine deep green color which it holds long after picking. The shape is uniform and the quality all that could be desired.

Pkt.	Oz.	¼ lb.	Lb.
.05	.15	.40	\$1.25

Early Green Cluster. Grows in clusters; early and productive.

Pkt.	Oz.	¼ lb.	Lb.
.05	.10	.30	\$1.00

Early Russian. The earliest variety.

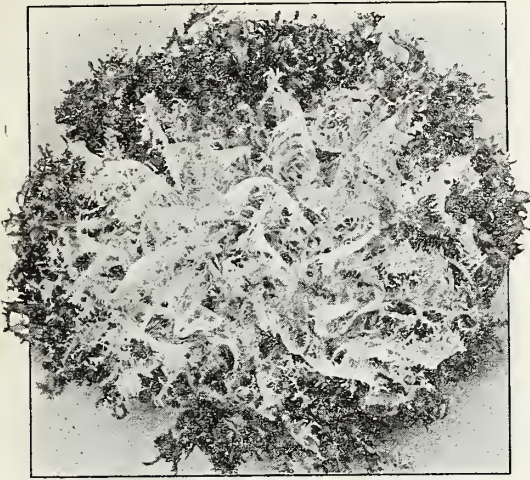
Pkt.	Oz.	¼ lb.	Lb.
.05	.10	.30	\$1.00

ENDIVE.

For early use, sow in May, scattering the seed thinly in drills ten inches apart, covering it lightly, and for a succession, every two or three weeks until midsummer. The plants must be blanched before using, which is accomplished by gathering the large outer leaves to a point at the top, and tying them together.

One ounce will sow 150 feet of drill.

	Pkt.	Oz.	¼ lb.
Broad-Leaved Batavian. Variety having wide, thick leaves, straight at the edges and curved toward the center. Color, dull green.....	.05	.15	.50
Green Curled. Has very curly leaves, the outer edges being much indented and crested. An attractive plant and one of the best varieties .....	.05	.15	.50
White Curled. A light yellowish-green variety; very curly and quite ornamental .....	.05	.15	.50



ENDIVE.

KALE (Borecole).

Sow early in May in a prepared bed, covering the seed lightly. Transplant in June, in rows three feet apart and two feet apart in row, and treat in the same manner as for cabbage. Kale is improved by a little frost, giving it a more delicate flavor.

One ounce to 150 feet of drill.

Green Curled Scotch. A round, dwarf variety, rarely exceeding eighteen inches in height, but spreading out under good cultivation to three feet in diameter05	.25	.85
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KOHL-RABI (Turnip-Rooted Cabbage).

A vegetable intermediate between the cabbage and turnip. The edible part, the bulb, grows on a stalk a few inches above the ground. It is best cultivated by sowing the seeds in rows in May, June and July, according to latitude.

One ounce will sow about 200 feet of drill.

Early Purple. Differing from the white only in color, being of a bluish purple.....	.05	.25	.85
Early White. Flesh white and tender. The best market sort.....	.05	.25	.85

LEEK.

The leek is very hardy and easily cultivated. It succeeds best in a light, well-enriched soil. Sow as early in the spring as practicable, in drills one inch deep and one foot apart. When six or eight inches high they may be transplanted in rows ten inches apart each way, as deep as possible, that the neck, being covered, may be blanched.

One ounce of seed to 150 feet of drill.

London Broad Flag. A large variety with broad leaves.....	.05	.25	.85
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MARTYNIA.

A strong-growing, hardy annual, with curious-shaped seed-pods, which, when young and tender, are highly prized for pickling. The pods are produced in great abundance, and should be gathered when about half grown. Plant in May or June in rows two feet apart, making hills about a foot apart.

One ounce will plant 50 hills.

Martynia Probosidea. Best for pickling05	.25	.85
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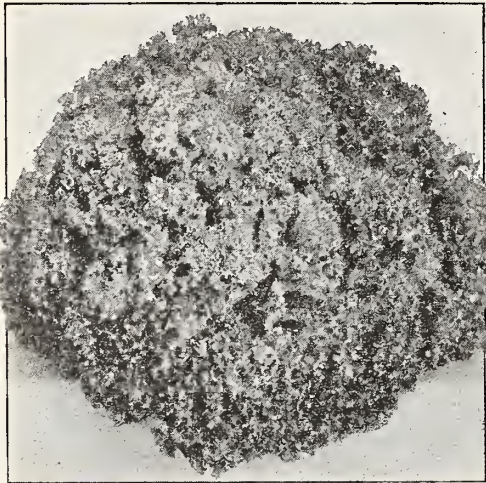
LETTUCE.

Lettuce thrives best in rich, moist ground. Sow the seeds in hotbeds in February or March, and transplant into a sheltered border with a southern exposure. For successive crops, sowing may be made in the open ground as early as spring opens, and continuing until July.

One ounce to 125 feet of drill.

Prices subject to change without notice. (See note on inside first cover.)

LETTUCE—Continued.



BOSTON CURLED LETTUCE.



TENNISBALL LETTUCE.

	Pkt.	Oz.	¼ lb.
Big Boston. Fine for forcing in cold frames, and for planting in the open ground .....	.05	.10	.30
Boston Curled. A variety of great beauty and of very superior quality. Leaves beautifully curled; attractive on table.....	.05	.10	.30
Brown Dutch. A large, hardy variety.....	.05	.10	.30
Deacon. Large and very solid heads, crisp and tender.....	.05	.10	.30
Defiance. Large, solid and crisp; stands the summer heat .....	.05	.10	.30
Early Curled Silesia. Fine for summer use .....	.05	.10	.30
Giant Crystal Head. Outside leaves curled, with red edges; heads large and solid ...	.05	.10	.30
Golden Queen. Medium sized; golden-yellow heads, tender and crisp; a fine early head variety for forcing or open air culture .....	.05	.15	.40
Hanson. Heads very large, solid, tender, crisp and of fine flavor; color, beautiful green outside and white within ...	.05	.10	.30
Hittinger's Belmont Forcing. Larger than the White-Seeded Tennisball, nearly as early and of excellent quality; a choice strain for forcing.....	.10	.40	
Iceberg. A large-heading variety; crisp and brittle, and color dark green, lightly tinged with brown on top of the head; leaves curled on the edges.....	.05	.10	.30
Mignonette. Small, compact, creamy-yellow heads tinged outside with russet; of superior quality, sweet, crisp and tender, very early and hardy; excellent "all seasons" variety.....	.05	.10	.30
Prize Head. One of the very best loose-bunching or non-heading varieties. Color bright green tinged with brownish red; very curly and of remarkably fine flavor. Grows quickly and all except the outer row of leaves are very brittle. It is probably the most easily grown lettuce in cultivation.....	.05	.10	.30
Salamander. A fine summer lettuce. Is slow to run to seed, and will stand the drought and heat better than other varieties.....	.05	.10	.30
Tennisball, Black-Seeded. Popular for open-air culture; heads compact, crisp and tender .....	.05	.10	.30
Tennisball, White-Seeded. A good early sort, used largely for forcing.....	.05	.10	.30
Victoria Cabbage. Hardy and fine for early sowing.....	.05	.10	.30
White Paris Cos (Romaine). A sort with long, narrow, upright leaves; does not head, but when tied up blanches very easily .....	.05	.10	.30

MELON—Musk.

Me ons thrive best in a moderately enriched, light soil. The hills should be six feet apart each way. After all danger of frost is past, plant twelve or fifteen seeds in each hill, and when well up, thin out to three or four plants.

One ounce to 60 hills; 2 to 3 pounds for an acre.

Prices subject to change without notice. (See note on inside first cover.)

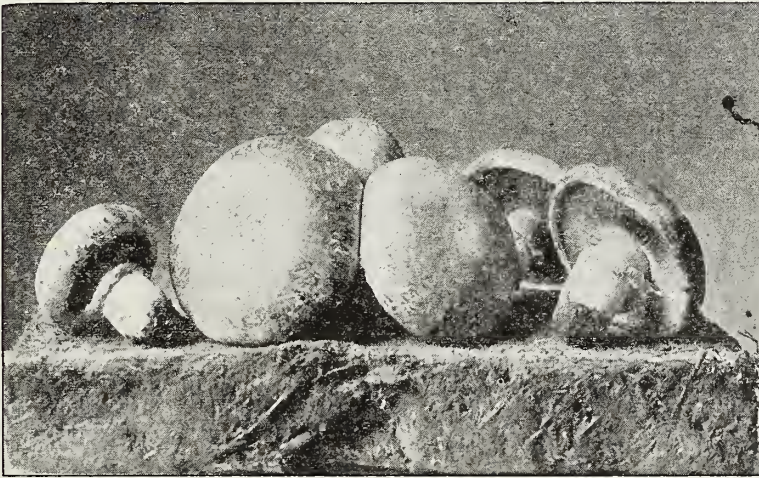
MELON—Continued.

	Pkt.	Oz.	¼ lb.
Banana. So called on account of its shape. The color is a delicate straw; flesh (the melon being nearly solid) a rich salmon. The flavor is delicious when the melons are thoroughly ripe. A fine early variety .....	.05	.15	.35
DELICIOUS GOLD LINED ROCKY FORD. Of a fine uniform shape, slightly oval; meat thick, green, and light gold toward center. A superior melon in flavor, and in every way .....	.05	.20	.65
Emerald Gem. Medium-size; flesh rich salmon, of delicious flavor and superior quality; early and prolific .....	.05	.15	.35
Green Citron. Fruit medium size, deeply netted, shape nearly round, flesh green, and of rich, delicious flavor .....	.05	.15	.35
HONEY DEW. The delicious honey-like flavor of this new melon met with instantaneous public favor and created a sensation wherever used. The fruit is good size, weighing eight to ten pounds; light colored, smooth skin; thick, light green flesh .....	.10	.20	.65
Large Round Yellow Cantaloupe. Flesh reddish-orange, sweet and of good flavor; an early and productive variety .....	.05	.15	.35
Large Yellow Musk. A very large variety, deeply ribbed and thickly netted; flesh salmon-yellow, thick and sweet .....	.05	.15	.35
Montreal. Large, round netted; flesh thick and light green .....	.05	.15	.35
Rocky Ford. Flesh green; medium size; oval shaped .....	.05	.15	.35
Surprise. Very early; medium size; salmon colored; flesh of superior flavor .....	.05	.15	.35

MELON—Water.

Plant in hills eight feet apart and cultivate same as musk melon. *One ounce for 30 hills; 4 or 5 pounds to the acre.*

Black Spanish. Fruit of large size, almost round; skin dark green, flesh red .....	.05	.10	.30
Citron. The standard variety for preserves .....	.05	.10	.30
Cole's Early. An extra good variety for growing in the Northern States, as it matures early. Large heart, flesh of fine texture and good flavor; rind thin .....	.05	.10	.30
Mountain Sweet. An old and reliable sort; flesh red .....	.05	.10	.30
Phinney's Early. Productive, early and finely flavored; flesh red .....	.05	.10	.30

MUSHROOM SPAWN.**MUSHROOM.**

Mushrooms may be grown in a warm cellar or shed in winter, or in the open air in summer. Take partially dry, fresh horse manure and lay it in a heap to ferment; turn and mix it well every few days, and when well fermented, it may be made into a bed, mixing it well together and beating or treading it firmly. Use a thermometer to thrust into the bed, and note the temperature. When the heat has partially subsided, leaving a temperature of 70° to 80°, put in the spawn, which may be inserted in pieces the size of a walnut, about two inches deep and six inches apart. After about two weeks, cover with fresh soil about two inches deep and beat it down evenly and firmly. Finish off with a covering of clean straw or hay about a foot thick. If

the temperature is right, mushrooms will begin to come up in about six to eight weeks, and the bed will continue bearing for about a month. One pound of spawn is sufficient for a bed 2 x 6 feet.

English Spawn In bricks, per lb., 20 cts.; 6 lbs., \$1.00
By mail, add six cents per pound for postage, and for larger shipments by mail, see rates on page 3 of this catalog.

MUSTARD.

A pungent salad used with cress. The seed is used for flavoring pickles, etc. Sow in May thickly in rows and cut when two or three inches high. *One ounce to 40 feet of drill.*

	Oz.	Lb.
Brown. More pungent in flavor than the white .....	.10	.85
White London. Mild flavor. Best for salads .....	.10	.85

Prices subject to change without notice. (See note on inside first cover.)

OKRA (Gumbo).

Sow about the middle of May, when the ground is warm, in hills about three feet apart; cover seed one-half inch and thin plants to three in a hill. Keep ground well hoed and earth up around plants to support them. Gather pods while young and tender. Excellent for soups, stews, etc., to which they impart a rich flavor. *One ounce will sow 40 feet of drill.*

Improved Dwarf Green. An early dwarf and prolific variety, with thick green pods. Pkt. Oz. ¼ lb. .05 .10 .30
White Velvet. The plants are about three and one-half feet high, early maturing and very productive. The pods are white, long, smooth and are tender until nearly full sized. .05 .10 .30



YELLOW GLOBE DANVERS ONION.

ONION.

No vegetable is more extensively known and cultivated than the onion. A good crop is impossible unless the soil is very rich and kept clean. Use well-rotted manure freely, and get the crop in as soon as possible in the spring, no matter if the weather is cold and unpleasant. Sow in drills one foot apart and cover about one-third of an inch, treading or rolling after sowing, so that the hot, dry atmosphere may not dry up and destroy the sprouting seed.

One ounce to 100 feet of drill; 5 pounds to the acre.

Early Yellow Cracker. Flat, early onion, of mild and delicate flavor, and a good keeper	Pkt.	Oz.	¼ lb.	Lb.
.....	.10	.30	.90	3.25
Extra Early Red Globe. Ten days earlier than the Wethersfield, of medium size and deep, rich color; an abundant producer and of good form and flavor, keeping well .....	.05	.30	.90	3.25
"K. & W." YELLOW GLOBE DANVERS. Extra choice seed, grown from bulbs especially and carefully selected as to shape; the most popular of all the yellow onions for market and home use. A heavy cropper, good keeper, and of fine, mild flavor. A profitable variety for market gardeners. ....	.10	.35	1.25	4.50
Large Red Wethersfield. Large size, productive and a good keeper. ....	.05	.30	.90	3.25
New Queen. A silver-skinned variety, of quick growth and remarkable keeping qualities. ....	.10	.40	1.15	4.00
Prizetaker. Large, pale yellow skin; flesh white; mild flavor. ....	.05	.30	.90	3.25
Southport, Red Globe. Flesh fine grain, mild and tender; matures quite early; good size .....	.10	.30	.90	3.25
Southport, White Globe. Clear white skin, large, globe-shaped; heavy yielder and good keeper .....	.10	.40	1.15	4.00
Southport, Yellow Globe. A large, handsome, yellow variety; very productive, of mild flavor and a good keeper .....	.10	.30	.90	3.25
White Portugal. A mild and desirable summer variety, flat in shape, extensively grown for pickling .....	.10	.40	1.15	4.00
Yellow Globe Danvers. Grown from selected stock. A standard variety .....	.05	.30	.90	3.00

ONION SETS.

Onion sets should be planted near the surface as early in the spring as the ground will permit, in drills about twelve inches apart and four inches in the rows. They produce a very early and profitable crop, and grow in any good soil. *Add six cents per pound if sent by mail, and for larger shipments by mail, see rates on page 3 of this catalog.*

White Onion Sets. Ready in April	1 lb.	8 lbs.
.....	.30	\$2.00
Yellow Onion Sets. Ready in April .....	.25	1.75

For larger quantities, prices will be given on application.

PARSLEY.

Parsley seed germinates very slowly, taking two to four weeks to come up; hence, if wanted early, no time should be lost by delaying the sowing. Make the rows twelve to fourteen inches apart. Thin to three or four inches apart, or transplant at this distance. Can be sown in hotbeds in February, or later in open ground. Late in autumn place glass frames over some of the plants to lengthen out the season of cutting. For garnishing purposes nothing equals parsley; it is also used in salads, soups, etc. Any good soil is suitable for growing this plant. *One ounce to 150 feet of drill.*

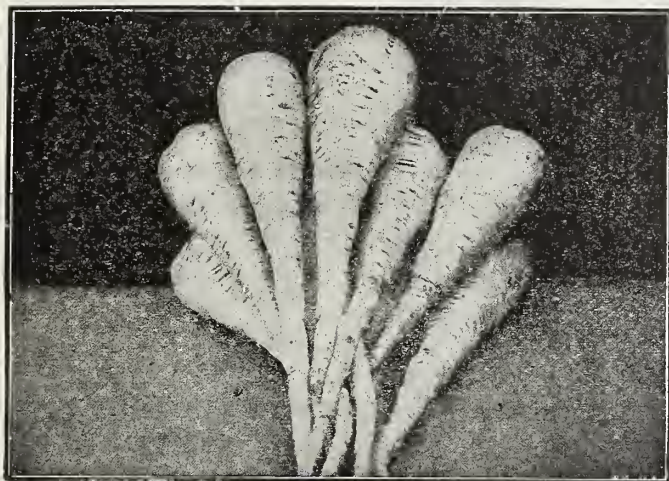
Extra Double Curled	Pkt.	Oz.	¼ lb.
.....	.05	.10	.35
Fern Leaved .....	.05	.10	.35

Prices subject to change without notice. (See note on inside first cover.)

PARSNIP.

Sow as early in the spring as the weather will admit, in drills fifteen inches apart, covering half an inch deep. When well up thin out to five or six inches apart in rows. Unlike carrots, they are improved by frosts, and it is usual to take up in the fall a certain quantity for winter use, leaving the rest in the ground until spring, to be dug as required.

One ounce to 150 feet of drill; 5 pounds to the acre.



DON PARSNIP.

Abbott's Improved. Smooth and quite large; one of the best.

Pkt.	Oz.	¼ lb.	Lb.
.05	.15	.50	\$1.50

Arlington Long White. Roots very long and smooth; one of the best for market gardeners.

Pkt.	Oz.	¼ lb.	Lb.
.05	.15	.50	1.50

Hollow Crown. Roots very long, growing mostly below the surface of the ground.

Pkt.	Oz.	¼ lb.	Lb.
.05	.15	.50	1.50

THE DON. A variety selected for handsome form, size, whiteness of skin and flesh, and solidity of texture. Specially recommended for market trade.

Pkt.	Oz.	¼ lb.	Lb.
.05	.15	.50	1.75

PEAS.

Peas, for an early crop, should be sown as soon as the ground is in working condition. The soil for their reception should be light, dry and well sheltered. Mild manure has a beneficial effect; but for many of the varieties the soil cannot be too rich. For general crops, the ground should be well manured the previous year, which causes them to yield more abundantly. When grown as a market crop, peas are never staked, and are sown in single rows, two or three inches deep, and from two to three feet apart, according to the variety or strength of the soil. When grown in small quantities for private use, they are generally sown in double rows, six or eight inches apart, and the tall varieties staked up by brush.

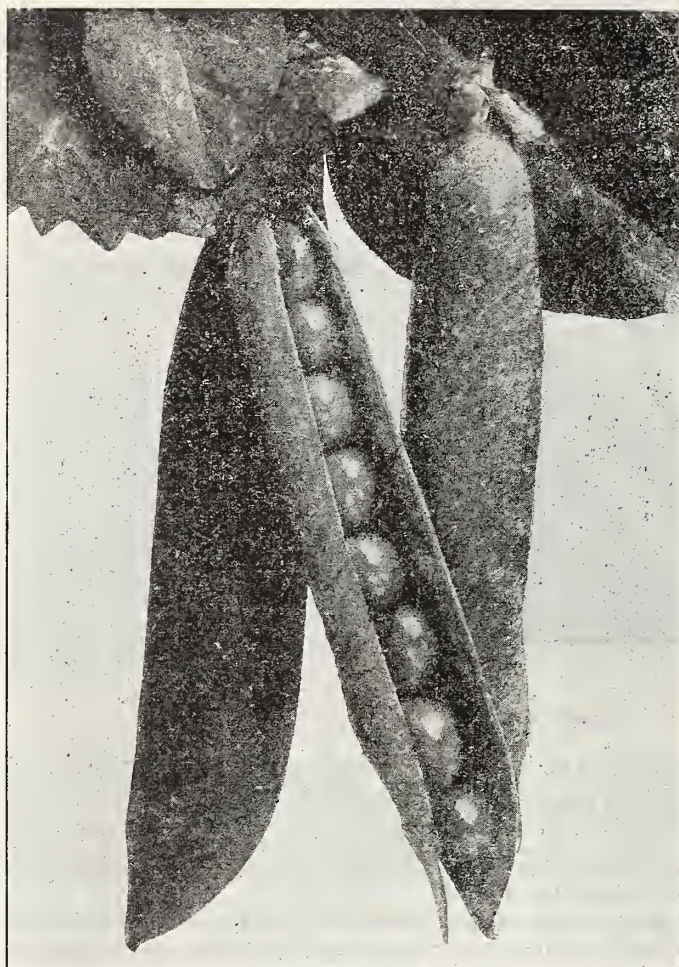
Two pounds will plant 75 to 100 feet of drill; from 84 to 112 pounds to the acre.

Peas ordered by mail are subject to an extra charge of six cents per pound for postage. For larger quantities by mail, see rates on page 3 of this catalog.

Extra Early.

	1 lb.	2 lbs.	14 lbs.
EARLY MORN. A variety of the Gradus type. The peas are large, closely packed in the pod, and of splendid flavor; 3 feet.....	.30	.50	\$3.25
GRADUS. One of the earliest large-podded peas. Produces healthy, vigorous vines two and one-half feet high, bearing well-developed pods containing peas of fine flavor.....	.30	.50	3.25
LAXTONIAN. One of the earliest large, wrinkled peas. Vines are vigorous, growing about eighteen inches high; large, even-sized, deep green pods, long and curved; peas of fine quality.....	.30	.50	3.25
LITTLE MARVEL. Extra early; similar to Nott's Excelsior. About fifteen inches high; dark green pods, often growing in pairs; very prolific.....	.30	.50	3.25
MARVELOUS (new). Similar to Sutton's Excelsior, but a little earlier. Vines growing from twelve to fifteen inches in height, bearing pods closely filled with peas of finest quality.....	.30	.50	3.25
NOTT'S EXCELSIOR. Robust and vigorous in growth, producing handsome pods closely packed with large peas of fine flavor; height, 12 inches.....	.30	.50	3.25
SUTTON'S EXCELSIOR. Same habit of growth as Nott's Excelsior, bearing larger pods, filled with large peas, tender and of most delicious flavor and produced in great abundance.....	.30	.50	3.25
THOMAS LAXTON. One of the best early wrinkled varieties, resembling the Gradus; pods large, and well filled with peas of excellent flavor. Hardy and extremely productive.....	.30	.50	3.25
WORLD'S RECORD. A popular large-podded, extra early, wrinkled pea. Its growth is quite similar to that of the Early Morn, but somewhat more dwarf; pods uniformly large, measuring four and one-half to five inches, nearly round and packed with handsome wrinkled peas of the finest flavor.....	.30	.50	3.25

Prices subject to change without notice. (See note on inside first cover.)



LAXTONIAN PEAS.

PEAS—Continued.

Second Early.

Carter's Quite Content. Pods longer and larger than any other second early variety. Vines and pods deep green, large peas of excellent flavor. Recommended for market gardeners; height, 3 to 4 feet.

1 lb.	2 lbs.	14 lbs.
.30	.50	\$3.25

Dwarf Telephone. A choice variety with dwarf vines, bearing large, handsome pods, with peas of fine quality. Vine eighteen inches high, stocky, healthy and vigorous, with almost no tendency to sport.

1 lb.	2 lbs.	14 lbs.
.30	.50	\$3.25

General and Late Crop.

ADMIRAL DEWEY. Foliage, vine and pods rich, dark green. Healthy and vigorous, producing pods of large size, filled with peas of splendid flavor. One of the best of all long-vine, large-podded peas; height, 3 1-2 feet.

1 lb.	2 lbs.	14 lbs.
.30	.50	\$3.15

Bliss' Everbearing. Fine wrinkled variety; pods three to four inches long, well filled with large peas; 2 feet.

1 lb.	2 lbs.	14 lbs.
.30	.50	\$3.15

CARTER'S IMPROVED DARK GREEN PODDED TELEPHONE. An improvement on Carter's Telephone for PURITY and uniformity of HABIT, being true to name, showing no tendency to inferior pods, but bearing in great abundance LARGE, HANDSOME, FINELY FORMED PODS, from five to six inches in length. A superior wrinkled variety; height, 3 feet	1 lb.	2 lbs.	14 lbs.
Champion of England. A well-known popular variety, unsurpassed in flavor, and very productive; 5 feet	.30	.50	\$3.15
Duke of Albany. Resembling Telephone in appearance; vine more dwarf; height, 2½ to 3 feet	.30	.50	3.00
Mammoth Podded Sugar (edible pods). Broad pods; cooked as string beans they are sweet and tender; height, 4 feet	.30	.50	3.15
PRINCE EDWARD. A favorite of the extra large-podded varieties. Vines about four and one-half feet high. Pods are large, filled with enormous peas of tender, sweet and excellent flavor	.35	.60	
PRODIGIOUS. A remarkably handsome, extremely large podded variety, closely resembling the Dark Podded Telephone. Vines about five feet in height, covered with pods from four and one-half to five inches in length, filled with large peas of fine quality	.30	.50	3.15
Yorkshire Hero. A green, wrinkled variety, of branching habit and fine flavor; 2½ feet	.30	.50	3.00

Field Varieties.

Black-Eyed Marrowfat. Extensively grown as a field pea; hardy and productive; 4 feet.	15 lbs.	60 lbs.
Royal Dwarf White Marrowfat. Similar in style and growth to the Black-eyed; white seeded; very productive; 3 feet	2.40	\$9.00
White Canada Field. Valuable for sowing with oats for green fodder; excellent for feeding to pigeons, etc.	2.40	9.00
	1.50	5.25

Prices subject to change without notice. (See note on inside first cover.)

PEPPER.

Grown largely for pickles. Sow in hotbeds early in April and transplant to the open ground when the weather is warm and settled. The rows should be two feet apart and the plants fifteen inches apart in the rows. Rich, warm, mellow soil.



One ounce of seeds will produce about 2,000 plants.

	Pkt.	Oz.
Large Bell. Large and of mild flavor .....	.05	.60
Large Squash. Productive; much used for pickles.....	.05	.60
Long Red Cayenne. Bright red; very productive.....	.05	.40
Monstrous Sweet Spanish. A very attractive, red, sweet pepper. The plants are about two and one-half feet high, upright, very compact, vigorous and productive. The fruits are very large and long, frequently seven inches in length and about two inches in diameter, with very thick, mild flesh of excellent quality. The color is deep green when fruit is young, rich red when ripe.....	.05	.60
Red Cherry. Small, round, smooth, glossy scarlet fruit.....	.05	.40
Sweet Mountain or Mammoth. Similar to the Bell, but larger .....	.05	.60

POTATOES.

10 to 12 bushels, or about 4 barrels, sufficient for one acre. One peck will plant 75 hills.

"ALL OUR STOCK IS GROWN IN MAINE."

 Prices quoted on application. 

Early Harvest. Extra early, large yielder; superb quality. The tubers average large size. A desirable early variety.

Early Rose. The pioneer of all the improved varieties, still very popular and highly esteemed.

Extra Early White Rose. As near perfection as any white potato grown, and one of the most reliable for earliness, quality and productiveness. Is uniform in size and shape, being oblong, with roundish seed end, and smooth surface. A grand general crop variety.

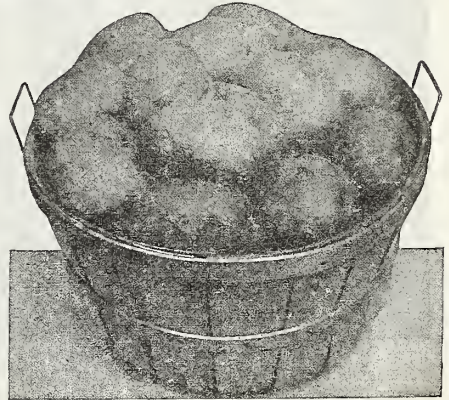
Gold Coin. Tubers are of a desirable size, in form slightly oblong, rather broad and quite thick, skin smooth, and of a light golden tint, sufficient to make them distinct from the white-skinned varieties; flesh pure white.

Improved Green Mountain. Improved by careful selection of seed. In season it is medium; one of the best yielders, and keeps well; color white, form round or oval, smooth skinned and a heavy yielder.

Irish Cobbler. One of the most reliable of the early varieties. Cream-white color, vigorous grower, ripens uniformly, and a good keeper.

Norcross. Large white potato; flat, oval, and perfect in shape; very fine in quality and a large yielder.

Sunlight. An extra early market variety, medium size, oval or oblong in shape, color very white; a handsome potato, of good quality.



PUMPKIN.

Same cultivation as for cucumbers and melons. One ounce for 20 to 25 hills; 3 pounds for an acre.

	Pkt.	Oz.	¼ lb.	Lb.
Connecticut Field. Large; used for stock .....	.05	.10	.35	\$1.10
Large Cheese. A large flat variety. Flesh yellow and sweet .....	.05	.10	.30	1.00
Mammoth King. The best large pumpkin in use. Immense, globular shaped, flattened a little at the end. Skin reddish yellow in color, and flesh rich orange. This is unquestionably the best mammoth pumpkin, running very uniform in shape and color .....	.05	.15	.45	1.50
Mammoth Tours. Grows to enormous size, frequently weighing from 100 to 150 pounds. Oblong in shape, and is mainly used for feeding stock .....	.05	.15	.45	1.50
Sugar or New England Pie. For making pies this variety cannot be excelled. The pumpkins are small, but very sweet, fine-grained and of the best quality .....	.05	.10	.30	1.00
Winter Luxury. Generally regarded as the finest quality pie pumpkin. Besides its high quality it is the best winter keeper of all. In size about nine or ten inches in diameter; skin is a beautiful deep orange yellow .....	.05	.10	.35	1.10

RHUBARB.

Sow in drills eighteen inches apart and one inch deep. Thin out the plants to six inches apart. In the fall prepare the permanent bed by trenching two feet deep, mixing a liberal quantity of manure with the soil. Into this set the plants about five feet apart each way. The stalks should not be cut until the second year. One ounce should give about 500 plants.

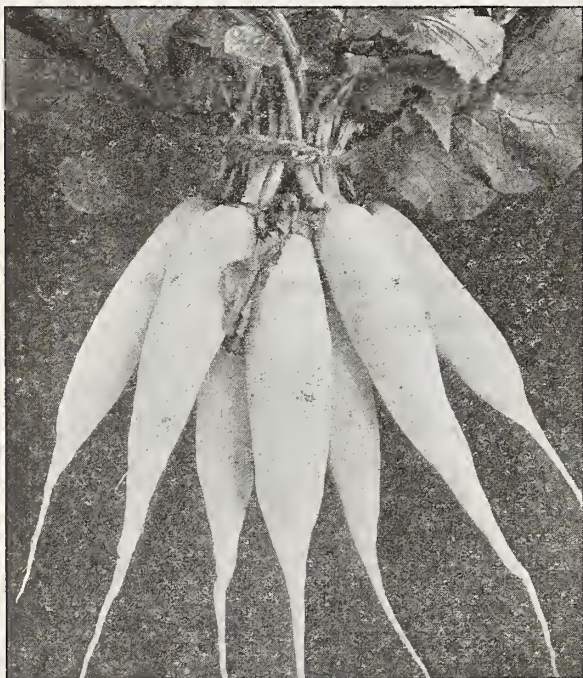
	Pkt.	Oz.
Linnaeus. Early, large, tender and of very fine quality.....	.05	.15

Prices subject to change without notice. (See note on inside first cover.)

RADISH.

Radishes thrive best in a light, rich, sandy loam; heavy or clayey soils not only delay their maturity, but produce crops much inferior, both in appearance and flavor. For a successive supply, sow from the middle of April until September, at intervals of two or three weeks. For an early supply they may be sown in a hotbed in February. *One ounce for 100 feet of drill.*

Crimson Giant Forcing. Rich, crimson color, flesh white and solid, and of a mild and delicious flavor. Grows to a large size without becoming pithy. Excellent for forcing Pkt. Oz. ¼ lb. Lb.



ICICLE RADISH.

maturing in about twenty days; round, bright red, with small tops; very mild.05 .15 .45 1.50

Round Black Spanish. One of the hardest and best for winter use05 .15 .45 1.50

SPINACH.

For spring and summer use, sow in drills one foot apart and one inch deep, as early as the ground can be worked, and every two weeks for a succession. For winter and early spring use, sow in September in well-manured ground; cover with straw on the approach of severe cold weather. The New Zealand spinach, which requires more room, may be started from seed early in spring to give greens during the heat of summer. *One ounce to 100 feet of drill; 10 to 12 pounds per acre.*

Fall or Winter. One of the hardest for fall planting.

Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.10.

Long Standing. Dark green; the longest standing before going to seed.

Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.10.

New Zealand. Of branching habit, makes a very large plant, which stands drouth well. Leaves thick and fleshy, enduring the entire summer.

Pkt., 5c.; oz., 15c.; ¼ lb., 50c.; lb., \$1.75.

Early Scarlet Globe.

Fine for forcing.

Shape roundish oval; large; brilliant red; flesh white, solid, crisp and mild05 .15 .45 1.50

Early Scarlet Turnip.

Round, scarlet, small, short top; mild and crisp05 .15 .45 1.50

Early Scarlet Turnip (white tip).

Handsone bright scarlet color, with white tip05 .15 .45 1.50

Early White Turnip-Rooted.

Round, clear white05 .15 .45 1.50

French Breakfast.

A variety of quick growth; very mild and tender. One of the best for forcing.05 .15 .45 1.50

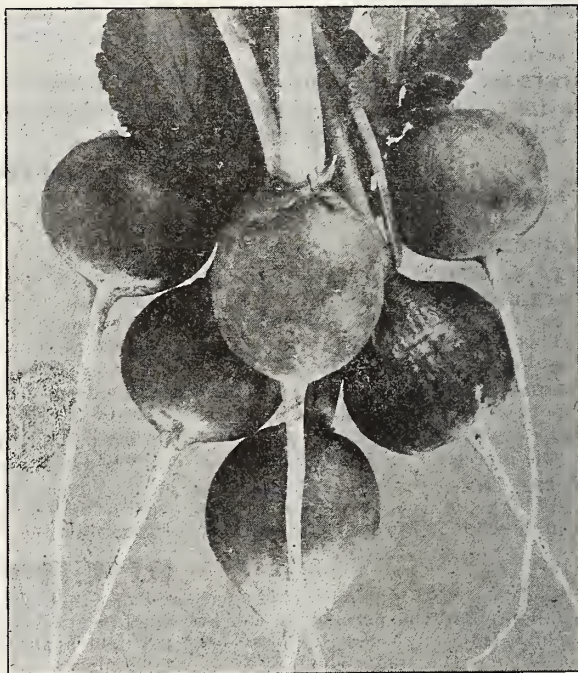
Icicle.

Quick growing; clear white. Fine for forcing05 .15 .45 1.50

Long Scarlet Short Top.

Very long and crisp; for frames or open ground05 .15 .45 1.50

Non Plus Ultra. The earliest forcing radish; extra early,



SCARLET TURNIP RADISH (white tip).

Prices subject to change without notice. (See note on inside first cover.)

SPINACH—Continued.

	Pkt.	Oz.	¼ lb.	Lb.
Round Thick-Leaved. A valuable variety, with thick, dark green leaves; long standing and hardy.....	.05	.10	.30	1.10
Savoy Leaved—Bloomsdale. Large, curled and wrinkled leaves, fine market sort. Especially recommended for market gardeners.....	.05	.10	.30	1.10
Victoria. A variety producing large, thick leaves of fine color and quality.....	.05	.10	.30	1.10

Market gardeners, and others using large quantities, are requested to write for special quotations.

SALSIFY (Oyster Plant).

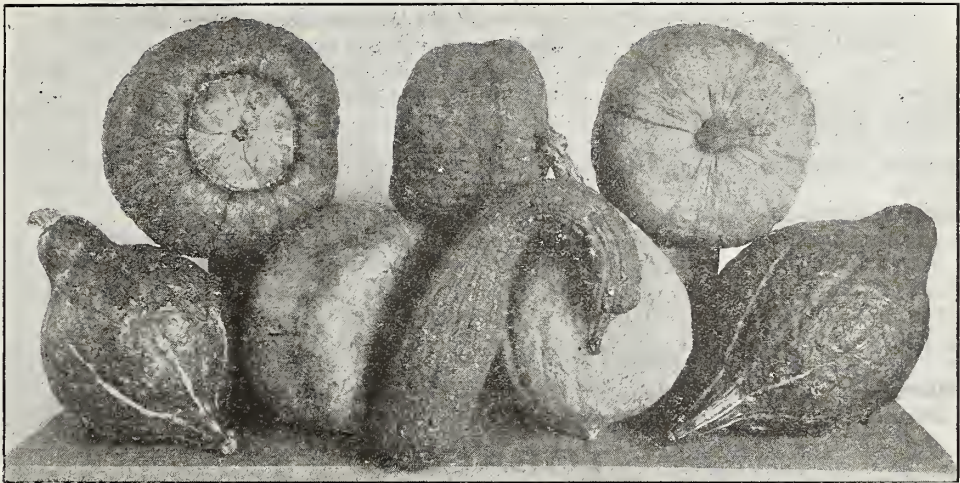
Commonly called vegetable oyster. Used stewed, boiled or fried. When cooked has an oyster flavor. Sow early in drills fifteen inches apart; cover the seeds with fine soil, an inch and a half deep.

One ounce to 50 feet of drill.

	Pkt.	Oz.	¼ lb.
Mammoth Sandwich Island.....	.05	.25	.85

SQUASH.

Any good, rich soil is adapted to the growth of the squash. They only thrive well in a warm temperature, as all the varieties are tender annuals, and the seed should not be sown in the spring until all danger from frost is past and the ground is warm and thoroughly settled. The hills for bush varieties should be about six feet apart; for running sorts, ten feet. Leave two plants to a hill. *Running varieties, 1 ounce to 20 hills; 4 pounds per acre. Bush varieties, 1 ounce to 50 hills; 2 pounds per acre.*

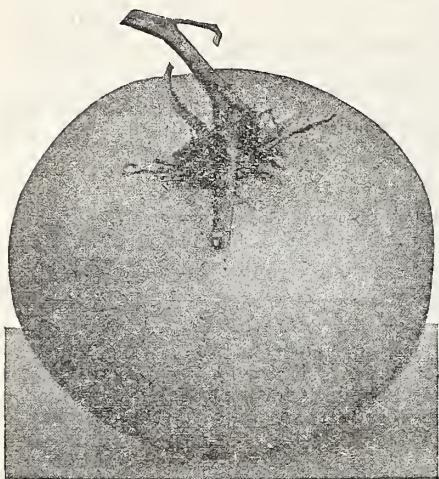
**SQUASH.**

	Pkt.	Oz.	¼ lb.	Lb.
Boston Marrow. A much esteemed variety; a good keeper and of excellent flavor. ....	.05	.10	.30	\$1.00
Delicious. In color it closely follows the Hubbard, and in thickness of flesh it surpasses nearly every variety. No squash compares with it in fineness and compactness of grain, dryness and sweetness and richness of flavor. It is a fall and winter squash, but does not acquire its best qualities until winter.....	.05	.15	.50	1.75
Early Prolific Marrow. For fall and winter use this is a very desirable sort. Is of excellent quality and keeps well. Color, brilliant orange red.....	.05	.10	.30	1.00
Hubbard. Standard winter squash, a general favorite and grown more extensively than any other late variety; color dark green; shell extremely hard; flesh dry, fine-grained and sweet; excellent keeper.....	.05	.15	.50	1.75
Hubbard, Blue. Hard shell, light blue in color, thick meat. Dry and fine quality. Favorite winter sort.....	.10	.30	1.00	3.50
Hubbard, Golden. Similar to Green Hubbard, of a rich orange-red color, and of fine flavor.....	.05	.15	.50	1.75
Hubbard, Warted. Dark green color, shell hard and warted; good keeper.....	.05	.15	.50	1.75
Mammoth Chili. Grows to a large size, often weighing over two hundred pounds; excellent for stock.....	.05	.15	.50	1.75
Pike's Peak or Sibley. A vigorous, prolific old standard, oval shape, tapering at blossom end, skin dark green, the flesh, of very superior quality, is light yellow... ..	.05	.15	.50	1.75
Summer Crook-Neck. Early, productive and of good quality; color orange-yellow.....	.05	.10	.30	1.00
Yellow Bush Scalloped. An early market variety; excellent for shipping.....	.05	.10	.30	1.00

TOMATO.

This vegetable is one of the most important of all garden products. They thrive best in a warm, light, rich soil. For early plants, sow about the first week in March in a hotbed, or in boxes or pots in a warm window. When the plants are about two inches high, set four inches apart in boxes three inches deep, or pot singly. If again transplanted before setting out, the plants will be still more stocky. Set out in the open ground about the first of June, four feet apart each way, using a shovelful of rotted manure in each hill. *One ounce will produce about 2,000 plants.*

Prices subject to change without notice. (See note on inside first cover.)



EARLIANA TOMATO.

TOMATOES—Continued.

Bonny Best. Color, an intense scarlet. It is roundish and slightly flattened at stem end. Early, prolific and uniform in shape and size.....	Pkt. .05	Oz. .35	¼ lb. \$1.25
Chalk's Early Jewel. A fine second early tomato, about ten days later than Earliana. Fruit large size and fine flavor. The plants are compact and strong; one of the best for shipping and the home garden .....	.05	.35	1.25
Dwarf Champion. Dwarf variety; fruit medium size, resembling the Acme in color. ....	.05	.30	1.00
Dwarf Stone. The largest fruited of the dwarf varieties, the fruit being of a bright scarlet, and growing in clusters; flesh very solid, firm and smooth .....	.05	.30	1.00
EARLIANA. The earliest large tomato. Its large size, handsome shape, beautiful red color, and fine quality are unsurpassed by any of the best early and medium sorts...	.05	.35	1.25
Fordhook. Extra early; perfectly smooth and solid; medium size .....	.05	.30	1.00
John Baer. An early variety. Smooth, solid fruit, brilliant red in color.....	.10	.50	1.50
Livingston's Beauty. Color very glossy crimson; grows in clusters of four or five; fruit large and solid .....	.05	.30	1.00
Livingston's Favorite. Productive; good flavor; few seeds; flesh solid, smooth and handsome .....	.05	.30	1.00
Livingston's Perfection. Early, large, smooth and solid; blood red color.....	.05	.30	1.00
New Stone. Fruit very large and deep, bright scarlet, smooth, ripening evenly to the stem without a crack; exceedingly solid and firm-fleshed, of the finest quality.....	.05	.30	1.00
Red Cherry. A small early variety, size and shape of a cherry; for pickling.....	.05	.30	1.00
Red Cross. Early, very smooth and even in size throughout the season.....	.05	.30	1.00
Scarlet Globe. Brilliant scarlet, ripens evenly, is smooth, round, a vigorous grower, and a most desirable table and canning variety..	.05	.35	1.25
Table Queen. Early, smooth, bright red color; flesh very solid; fine table variety.....	.05	.30	1.00
Yellow Plum. Similar to Red Cherry, excepting color bright yellow .....	.05	.30	1.00

TOBACCO.

One ounce is sufficient for an acre.

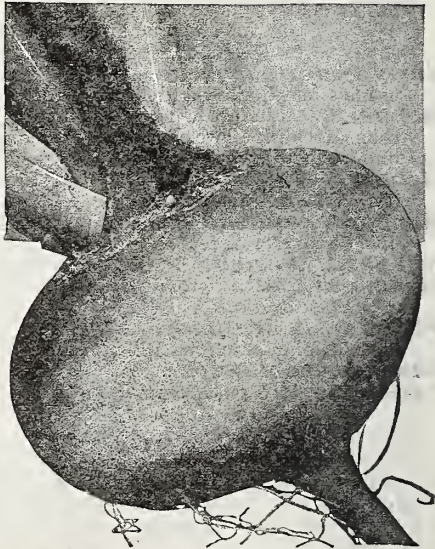
Connecticut Seed Leaf. One of the best varieties. The leaves are of good width and length, and grow closely on the stalk.....	.05	.30	1.00
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TURNIP.

Turnips thrive best in rich, sandy, gravelly soil. The earliest varieties can be sown as soon as the ground can be worked, either in drills or broadcast. For a succession sow at intervals of a fortnight until the last week in July for the fall and main crops. To keep the roots fresh during the winter, they may be placed in a cool, dry cellar and buried with dry sand.

One ounce for 150 feet of drill; 1 1-2 to 2 pounds in drill or 2 1-2 to 3 pounds broadcast to the acre.

Early White Six Weeks. Pure white; very early....	Pkt. .05	Oz. .15	¼ lb. .45	Lb. \$1.35
Golden Ball. A rapid grower of excellent flavor; bright yellow, good keeper, and a superior table variety.	.05	.15	.45	1.50
Long White or Cow Horn. Flesh white, fine grained and sweet, and of excellent quality .....	.05	.15	.45	1.50
Purple-Top Milan. The earliest variety in cultivation. Flesh white, hard, and of excellent quality .....	.05	.20	.60	2.00
Purple-Top Strap Leaf. Excellent variety for main crop, equally good for spring or fall sowing; white flesh .....	.05	.15	.45	1.50



PURPLE-TOP WHITE GLOBE.

Prices subject to change without notice. (See note on inside first cover.)

TURNIP—Continued.

	Pkt.	Oz.	¼ lb.	Lb.
Purple-Top White Globe. Globular shape, handsome and of superior quality, either for the table or stock. Is a heavy producer, early and a good keeper. The flesh is white and skin white, with purple at portion which grows above the ground	.05	.10	.35	\$1.25
Sweet German. White, sweet and a good keeper.....	.05	.15	.45	1.50
White Egg. Oval, handsome and sweet.....	.05	.15	.45	1.50
Yellow Aberdeen. An excellent hardy variety, keeping well through the winter.	.05	.15	.45	1.35
Yellow Stone. Fine, hard winter sort.....	.05	.15	.45	1.50

RUTA BAGA or SWEDE TURNIP.

Carter's Imperial Hardy Swede. An improvement upon the other varieties, being larger, the flesh firmer, and an excellent keeper.....	.05	.15	.45	1.50
Skirving's Purple-Top. A standard variety; hardy and productive.....	.05	.15	.45	1.50

FORAGE SEEDS, GRAINS, ETC.

At the Lowest Market Rates and of the Best Quality.

Barley.

Chevalier. A two-rowed variety. Head a little longer than the six-rowed varieties and the grain larger, plump, extra heavy and in favorable seasons nearly white. On account of its attractive appearance and fine quality, the grain brings the highest price, and is also extensively grown for green foliage.

Buckwheat.

Japanese. The most desirable variety. If sown at the same time as the Silver Hull it will ripen earlier and yield nearly double the amount. It is of much stronger growth than the common buckwheat, and the kernels are fully twice the size.

Millet.

Japanese Barnyard. Succeeds in almost any ordinary soil, and may be sown from the middle of May to the first of July. Is distinct from other varieties. Enormous crop, and is excellent, either green or cured, for hay. Exceedingly popular as a forage plant.

Golden. Medium early forage plant, prolific in stalk and grain.

Hungarian. Probably used more than any other millet for fodder during the summer months. Remains green when almost all other vegetation has dried up. It is one of the very best plants for green fodder or for ensilage; makes hay of good quality.

Sudan Grass. A new annual forage crop. Sudan grass is a drought-resistant hay crop of great merit. In dry sections it yields more forage than millet, and the hay is relished by stock of all kinds. After the ground has become warm, seed may be sown broadcast at the rate of from 16 to 24 pounds per acre; if planted in drills 18 to 24 inches apart from 4 to 6 pounds per acre will be sufficient.

Oats.

The "K. & W." Northern White. This variety is free from rust, early and extremely hardy, yielding remarkably heavy crops, the grains being large, white, plump and first-class in every particular. These oats have been carefully selected and thoroughly cleansed.

Swedish Regenerated. One of the most productive varieties of oats ever introduced. The straw is very firm, stiff and elastic and does not readily lodge. Early and ripens uniformly. The kernel is large and plump, with a thin hull, and of fine general appearance.

Rye.

Rosen Rye (Winter). Produces a strong, vigorous straw and stools to a remarkable degree. The grain is large, plump, heavy and of beautiful color, commanding a premium on the market over other grains. Owing to its vigorous stooling property less seed is required, the practice being about one and one-half bushels per acre. At the State Experimental Farm in Michigan, for the past three years, the average yield has been 41.3 bushels per acre, of an exceptionally high quality of grain, and 46 bushels per acre is not an unusual yield.

Winter. This variety is fast gaining in popularity as a cover crop and produces an abundance of early green feed. If allowed to mature will yield a heavy crop of grain and a fine quality of straw if cut about July 1.

Spring. For a catch crop this is best for sowing in the spring, as a crop may be obtained by later sowing than any other grain, although it does not yield as heavily as the winter rye.

Prices subject to change without notice. (See note on inside first cover.)

FORAGE SEEDS, GRAINS, ETC.—Continued.**Wheat.**

Marquis (Spring). A variety produced by scientific cross breeding of the hard Calcutta and the frost-resisting Red Fife variety. First introduced by the Central Experiment Station in Ottawa, Canada, and has since rapidly displaced many other varieties in the Northwest and in Canada. In appearance Marquis wheat is similar to Red Fife, but the heads as a rule are heavier and the stalks shorter, making it less likely to lodge. The kernel is flinty, a little darker red and more plump than Fife. It is beardless, having smooth yellow chaff, but its most valuable feature lies in its earliness, as it matures a week or ten days earlier than Red Fife. Thrashing reports from the Northwest indicate yields of 40 to 50 bushels per acre; weight, 64 to 66 pounds per measured bushel, and they report it to be of the highest milling quality. Not in many years has such a valuable variety been introduced. Our stock is of the highest purity and germination. Farmers who planted Marquis wheat in New England last season had most satisfactory returns.

Write for quotations on all grain and grass seeds.

Soja Beans

Produce an enormous crop of both vines and pods. Valuable as a forage crop, and for fertilizing the soil, also for pasturing, feeding as green fodder, and for silo purposes. Sow $\frac{1}{2}$ bushel to the acre.

Per pk., \$1.25. Per bu., \$4.75.

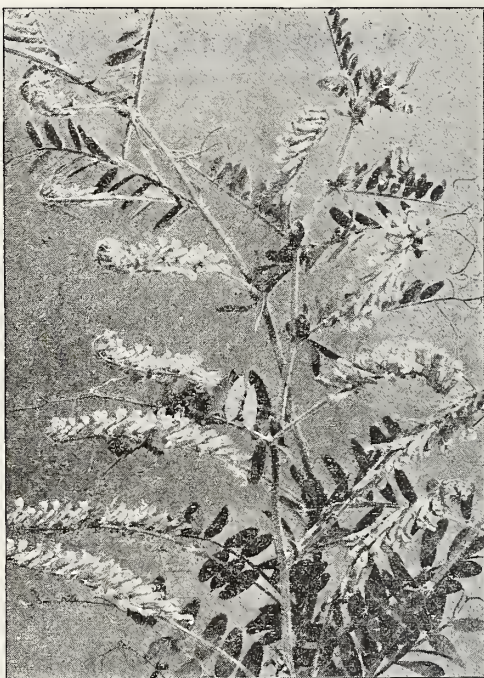
Vetches or Tares.

Spring Vetches. Highly valuable for soiling or for green manuring. Sometimes grown with oats for mowing and feeding to stock. Use 120 to 180 pounds to the acre broadcast, or 60 to 120 pounds in drills.

Per lb., 15 cts. Per 100 lbs., \$13.50.

Winter Vetches. Also called Sand Vetch, or Hairy Vetch. Recommended for fall sowing with rye, which serves as a support. It is perfectly hardy in all parts of the country, can be harvested or plowed under and the ground used for the usual spring crop. Sow 60 pounds of the seed per acre, together with $\frac{1}{2}$ bushel of rye.

Per lb., 30 cts. Per 100 lbs., \$27.00.



VETCHES.



SOJA OR SOY BEANS.

Early English Dwarf Essex Rape.

Superior to any other variety offered.

A forage plant of great merit, easily grown in any locality, and one of the most satisfactory quick-growing crops, especially for sheep.

As a fattening food for sheep, cattle, calves or pigs, it is without a rival in point of cheapness, is hardy, withstands drought, and will produce a crop in any soil. The seed may be sown from May to July, 10 to 12 pounds per acre.

Per lb., 20 cts. Per 100 lbs., \$16.50.

“New Era” Cow Peas.

The seed resembles a small brown bean in appearance, and is one of the best varieties to sow, as it is extremely early, a good cropper, and produces more seed pods than most other kinds. A very valuable forage plant. Sow at the rate of $1\frac{1}{2}$ bushels per acre.

Per pk., \$1.50. Per bu., \$5.50.

ALL LEGUMES—INOCULATE, FOR BEST RESULTS, WITH NITROGEN FIXING BACTERIA.

Prices subject to change without notice. (See note on inside first cover.)

"K. & W." LAWN GRASS SEED.



To secure a rich, firm, deep and enduring lawn of luxuriant richness, not only should it be thoroughly prepared, well drained and graded, and enriched with decayed manures and commercial fertilizers, but if carefully sown with a sufficient quantity of

"K. & W." LAWN GRASS SEED,

it will result in a beautiful compact sward which will remain fresh and green throughout the season.

If sent by mail, add six cents per pound for postage, and for larger shipments by mail, see parcel post rates on page 3 of this catalog.

Per pound, 25 cents.

Bag containing 5 pounds, \$1.15; 10 pounds, \$2.20; 25 pounds, \$5.00.

PERMANENT MIXTURE. FOR GOLF LINKS AND PUTTING GREENS.

Especially prepared for sowing to produce a short, dense sward.

If sent by mail, add six cents per pound for postage, and for larger shipments by mail, see parcel post rates on page 3 of this catalog.

Per pound, 40 cents.

VEGETABLE PLANTS.

CELERY PLANTS—Ready June 1st to 15th.

Golden Self-Blanching, White Plume.
Boston Market,

TOMATO PLANTS—Ready May 15th to 20th.

Earliana, Dwarf Champion,
Red Cross, Favorite,
Scarlet Globe, Perfection,
Table Queen, Bonny Best,
and other standard varieties.

One dozen in each box.

CABBAGE PLANTS.

Early Summer Varieties. Ready May 15th to 20th
For Winter Crop. Ready June 15th to 20th.

CAULIFLOWER PLANTS.

Ready May 15th to 20th.

RHUBARB ROOTS AND ASPARAGUS ROOTS.

Ready in April.

Prices subject to change without notice. (See note on inside first cover.)

SUMMER-FLOWERING BULBS.

GLADIOLUS.

Plant in good garden soil, after the ground becomes warm in the spring, in full exposure to the sun. Set bulbs from 4 to 6 inches deep.

America. Soft pink. Per doz., 35c.; per 100, \$2.50.
Augusta. White. Per doz., 35c.; per 100, \$2.50.
Baron Joseph Hulot. Deep blue. Per doz., 50c.; per 100, \$3.50.
Mrs. Francis King. Flame pink. Per doz., 35c.; per 100, \$2.50.
Velvet King. Red. Per doz., 50c.; per 100, \$3.00.
Klondike. Yellow. Per doz., 60c.; per 100, \$4.00.
Groff's Hybrid. Mixed. Per doz., 30c.; per 100, \$2.00.
Superfine Mixed. Per doz., 50c.; per 100, \$3.00.

CALADIUM ESCULENTUM.

Eight to ten inches in circumference. Each, 10c.; per doz., \$1.00.

MADERIA VINE.

Each, 5c.; per doz., 50c.

GLOXINIAS.

Mixed Varieties. Each, 10c.; per doz., \$1.00.

Caladium and dahlias ordered by mail are subject to an extra charge of twenty cents per dozen for postage.

All other bulbs ordered by mail are subject to an extra charge of five cents per dozen for postage.

TUBEROUS BEGONIAS.

The tuberous-rooted begonias are among the handsomest of summer-flowering bulbs, as they bloom continuously throughout the summer.

Single.		Double.	
Each.	Doz.	Each.	Doz.
Scarlet.....	.06 .60	Scarlet.....	.10 \$1.00
Orange.....	.06 .60	Orange.....	.10 1.00
Crimson.....	.06 .60	Crimson.....	.10 1.00
Pink.....	.06 .60	Pink.....	.10 1.00
White.....	.06 .60	White.....	.10 1.00
Yellow.....	.06 .60	Yellow.....	.10 1.00
Mixed.....	.06 .60	Mixed.....	.10 1.00

TUBEROSE.

Large bulbs. Each, 5c.; per doz., 50c.; per 100, \$3.00.

LAWRENCE DAHLIAS.

Direct from the growers at Elmwood Dahlia Farm.

Selected for variety of color, and for form, size and perfection of bloom. All bulbs mossed and started, and ready for early flowering. Stock for shipment, May 15th to June 1st. Each, 15c.; per dozen, \$1.50.

GERANIUMS in 3-inch and 4-inch pots.

CANNAS and FUCHSIAS in 4-inch pots.

HELIOTROPE, CALENDULAS and LOBELIAS in 3-inch pots.

Potted plants and plants in baskets and boxes cannot be sent by mail.

DUTCH BULBS.

FOR FALL PLANTING AND SPRING BLOOMING.



TULIP.

To the lover of flowers there are few prized as those which are produced from bulbs. The reason is easily found. Within the bulbs are stored all the future glory of leaves and flowers, only requiring the simplest culture to develop them in their highest perfection, and with no other material can be secured such a wealth of charming flowers of infinite variety of form and coloring, with so little trouble and at so small an outlay. Our sources of supply are the best, the leading growers having for years supplied us with their choicest stock, and we solicit your patronage. Special prices to florists, and those ordering large quantities.

NATURAL COLORED RAFFIA.

The best material for tying plants; very soft, strong and pliable. Fine, long, selected raffia for fancy work.

Price on application.

Colored raffia (all shades), 15 cents per package.



QUANTITY OF SEEDS REQUIRED FOR A GIVEN NUMBER OF HILLS OR LENGTH OF DRILLS.

Asparagus.....	1 ounce....	50 feet of drill	Melon, Musk.....	1 ounce....	60 hills
Beet.....	1 ounce....	50 feet of drill	Mustard.....	1 ounce....	40 feet of drill
Beans, Dwarf.....	2 pounds..	100 feet of drill	Okra.....	1 ounce....	40 feet of drill
Beans, Pole.....	2 pounds..	150 hills	Onion.....	1 ounce....	100 feet of drill
Carrot.....	1 ounce....	100 feet of drill	Onion sets.....	2 pounds..	50 feet of drill
Celery.....	1 ounce....	100 feet of drill	Parsley.....	1 ounce....	150 feet of drill
Corn, Sweet.....	1 pound...	125 hills	Parsnip.....	1 ounce....	150 feet of drill
Cress.....	1 ounce....	100 feet of drill	Peas.....	2 pounds..	75 to 100 feet of drill
Cucumber.....	1 ounce....	50 hills	Pumpkin.....	1 ounce....	20 to 25 hills
Dandelion.....	1 ounce....	150 feet of drill	Radish.....	1 ounce....	100 feet of drill
Kale.....	1 ounce....	150 feet of drill	Salsify.....	1 ounce....	50 feet of drill
Kohlrabi.....	1 ounce....	200 feet of drill	Spinach.....	1 ounce....	50 feet of drill
Leek.....	1 ounce....	150 feet of drill	Squash, bush variety.....	1 ounce....	50 hills
Lettuce.....	1 ounce....	125 feet of drill	Squash, running variety.....	1 ounce....	15 hills
Martynia.....	1 ounce....	50 hills	Turnip.....	1 ounce....	150 feet of drill
Melon, Water.....	1 ounce....	30 hills			

Prices subject to change without notice. (See note on inside first cover.)

BOOKS ON RURAL TOPICS.

SPECIALLY SELECTED TO MEET THE NEEDS OF ALL WITH A HOME IN THE COUNTRY OR SUBURBS.

All books sent postpaid on receipt of price.

Gardening.

Amateur's Practical Garden Book.....	\$1.00
Asparagus Culture.....	.50
Cabbage, Cauliflower and Allied Vegetables.....	.50
Carnation Culture—Commercial.....	1.50
Celery Culture.....	.50
Culinary Herbs.....	.75
Ferns and How to Grow Them.....	1.25
Garden Guide—Paper.....	.55
Garden Guide—Cloth.....	.85
Gardening for Pleasure.....	1.50
Gardening for Profit.....	1.50
Home Vegetable Garden.....	1.00
How to Make the Garden Pay.....	1.00
How to Make a Flower Garden.....	1.60
Landscape Gardening—Practical.....	1.50
Melon Culture.....	.50
Milady's House Plants.....	1.00
Mushrooms—How to Grow Them.....	1.00
Mushroom Growing.....	1.50
New Onion Culture.....	.50
New Rhubarb Culture.....	.50
Plant Culture.....	1.50
Potato Culture, A B C of.....	.50
Rose Culture—Commercial.....	1.50
Sweet Peas for Profit.....	1.50
Strawberry Culture, A B C of.....	.50
Strawberry Cultivist.....	.25
The Book of Corn.....	1.50
The Potato.....	.75
Tomato Culture.....	.50
Vegetable Gardening.....	1.75
Water Gardening, The Book of.....	2.50
Weeds of the Farm and Garden.....	1.50
Window Flower Garden.....	.50

Farming.

Bommer's Method of Making Manure.....	.25
Butter Making, A B C in.....	.50
Chemistry of the Farm.....	1.25

Clean Milk.....	\$1.00
Dairy Farming.....	1.00
Draining Land.....	1.00
Farm Grasses of the U. S.....	1.00
Farm of Four Acres, Our.....	.30
Farm Manures.....	1.50
Feeds and Feeding.....	2.50
Fertilizers and Crops.....	2.50
First Lessons in Dairying.....	.50
Key to Profitable Stock Raising.....	.25
Modern Methods of Testing Milk and Milk Products.....	1.00
Silos, Ensilage and Silage.....	.50
Young Farmer—Some Things He Should Know.....	1.50

Fruit.

American Apple Orchard.....	1.00
Beginners' Guide to Fruit Growing.....	.75
Fruit Harvesting, Marketing and Storing.....	1.00
Fruits and Vegetables under Glass.....	3.50
Modern Fruit Marketing.....	1.25
Pruning Book.....	2.00
Small Fruit Cultivist.....	1.00

Insects and Spraying.

Crops, Spraying.....	.50
Insects and Insecticides.....	1.50
Insects Injurious to Fruits.....	2.00
Insects Injurious to Vegetables.....	1.50

Poultry, Bees, Etc.

A Living from Eggs and Poultry.....	.75
Beekeeping Explained, Mysteries of.....	1.00
Canary Birds.....	.50
Duck Culture.....	.75
Egg Farm, New, Revised and Enlarged.....	1.00
Poultry Craft.....	1.50
Poultry Diseases.....	.75
Profits in Poultry and Their Profitable Management.....	1.00
Turkeys, How to Raise Them.....	1.00

VALUABLE TABLE SHOWING THE QUANTITY OF SEED USUALLY SOWN UPON AN ACRE.

Lbs. per bush.		Lbs. per bush.	
Alfalfa.....	60	Onion Sets, in drills.....	32
Barley (broadcast).....	48	Orchard Grass.....	14
Beans, Dwarf, in drills.....	60	Parsnip, in drills.....	5 lbs.
Beans, Pole, in hills.....	60	Peas, smooth (field varieties), broadcast.....	60
Beets, Mangel Wurzel.....	5 lbs.	Peas, wrinkled, in drills.....	56
Beets, Table, in drills.....	6 lbs.	Perennial Rye Grass.....	24
Buckwheat.....	1 bu.	Potatoes (cut tubers).....	60
Cabbage, in beds to transplant.....	4 to 5 ozs.	Pumpkin, in hills.....	3 lbs.
Carrot, in drills.....	3 to 4 lbs.	Radish, in drills.....	8 to 10 lbs.
Clover, Alsike.....	60	Red Top (re-cleaned).....	about 32
Clover, Crimson.....	60	Rhode Island Bent, chaff seed.....	10
Clover, Red.....	60	Rhode Island Bent (fancy re-cleaned).....	40
Clover, White.....	60	Rough Stalked Meadow.....	14
Corn, for fodder, in drills.....	56	Rye, broadcast.....	56
Corn, Sweet, in hills.....	50	Sage, in drills.....	12
Creeping Bent.....	20	Sheep Fescue.....	12
Crested Dogtail.....	21	Spinach, in drills.....	10 to 12 lbs.
Cucumber, in hills.....	2 lbs.	Squash (bush varieties), in hills.....	2½ lbs.
English Rye Grass.....	24	Squash (running varieties), in hills.....	4 lbs.
Fine-leaved Fescue.....	35 lbs.	Sudan Grass (broadcast).....	16 to 24 lbs.
Hard Fescue.....	30 lbs.	Sweet Vernal (annual).....	2 bu.
Hungarian.....	48	Sweet Vernal (perennial).....	2 bu.
Italian Rye Grass.....	18	Tall Fescue.....	14
Kentucky Blue Grass.....	14	Tall Meadow Oat Grass.....	4 to 5 bu.
Lawn Grass.....	25	Timothy.....	½ bu.
Meadow Fescue.....	15	Tobacco.....	1 oz.
Meadow Foxtail.....	7	Tomato, to transplant.....	4 ozs.
Melon, Musk, in hills.....	2 to 3 lbs.	Turnip, broadcast.....	2½ to 3 lbs.
Melon, Water, in hills.....	4 to 5 lbs.	Turnip, in drills.....	1½ to 2 lbs.
Millet, German.....	50	Various Leaved Fescue.....	30 lbs.
Millet, Japanese.....	about 40	Vetches.....	(See page 38.)
Oats, broadcast.....	32	Wheat, broadcast.....	1½ to 2 bu
Onion, in drills.....	5 lbs.	Wood Meadow.....	2 to 2½ bu

FLOWER SEEDLINGS.

Aster,	Pinks,	Petunia,	Stocks,	Pansies (choice strain)
Marigold,	Phlox,	Snapdragon,	Zinnia,	Verbenas.

Prices subject to change without notice. (See note on inside first cover).

**"FOR THE LAND'S SAKE"—
THAT'S S-O-M-E CORN!**



**BOWKER'S
Fertilizers
AND
Stockbridge
SPECIAL-COMPLETE
Manures
1919**

VICTORY YEAR finds these celebrated fertilizers right up to standard and quality. In this great year you will want to grow big victory crops—market prices will be good, for the demand for all staple crops is bound to be larger than ever. Use Bowker's and Stockbridge to supply the necessary plant food. This photo-

graph shows a big crop grown on Bowker's in Connecticut. We are sure Maine farmers can do as well if they use the same fertilizer.

Ask for a copy of Bowker's New Farmer's Almanac and "How to Get a Crop of Corn." Both mailed free.

KENDALL & WHITNEY, Agents, - Portland, Maine.

Prices subject to change without notice. (See note on inside first cover.)

The World's Best**Bradley's**By Every Test

Complete Fertilizers

SUPPLY the available plant food elements required, and they also help to overcome unfavorable conditions of weather and soil, maintaining an adjustment between the needs of the crop and the varying climatic conditions, which it is impossible for incomplete mixtures or single element materials to do.

Bradley's Fertilizers promote early and continuous growth, bring maturity at proper time for harvesting, and *they keep up the balance of soil fertility.*

BRADLEY'S FERTILIZERS are compounded of the HIGHEST GRADE MATERIALS skillfully combined in proper proportions, carefully and thoroughly manufactured to a PERFECT MECHANICAL CONDITION.

A full stock of standard fertilizers constantly on hand

————— including —————

Special XL Superphosphate, without potash

Root Crop Manure

Special Potato Manure, without potash

Maine Potato Special

and many other brands, with and without potash

Odorless Grass and Lawn Top Dressing, without Potash

THE BEST TIME to apply this fertilizer to grass land is just after the frost is out.

The spring rains quickly dissolve it and wash the plant food within reach of the grass roots. When grass becomes run out it is best to plow the land, cultivate one season and then reseed, but when there is a good sod the yield of hay can be kept up for a long period by using this fertilizer as a top dressing.

It makes a lawn *more luxuriant* and obviates the necessity of offending the senses by applying stable manure to the home grounds.

It is sown broadcast like grass seed and at the rate of six hundred to eight hundred pounds per acre.

ASK FOR PRICE LIST CONTAINING FULL INFORMATION

The American Agricultural Chemical Company

BRADLEY FERTILIZER WORKS
92 STATE ST., BOSTON

KENDALL & WHITNEY, Agents,

-

-

-

Portland

Prices subject to change without notice. (See note on inside first cover.)

Chemicals and Fertilizers.

Plain Superphosphate or Acid Phosphate. 14 to 16 per cent. available phosphoric acid. In 200 pound bags.

Nitrate of Soda. 15 per cent. nitrogen; 18.23 per cent. ammonia. In 200 pound bags.

PURE GROUND BONE.

4 to 5 per cent. ammonia, 21 to 23 per cent. phosphoric acid.

A valuable fertilizer, especially for lawns, vines and fruit trees.

ASHES.

Unleached, hard wood ashes, put up in 100 lb. bags. Especially valuable for lawns.

MAGIC BRAND MANURE ASH POTASH.

A valuable fertilizer, especially adapted to the requirements of market gardeners and florists. Contains 2½ per cent. phosphoric acid and 5 per cent. water soluble potash. In 100 lb. bags. Price, \$3.25 per 100 lbs.

SHEEP MANURE.

A pure, natural manure, and the most nutritious food for plants. Its effect is immediate and lasting; it is clean to handle, and is the best of all manures for mixing with the soil for greenhouse plants. As a lawn top-dressing it is unequalled. For mixing with soil, take one part of manure to six parts soil. For making a liquid, take one pound manure to five gallons of water, which can be used with safety daily if necessary.

SHREDDED CATTLE MANURE.

Packed especially for florists and greenhouse vegetable growers. In 100 lb. bags only.

PRICES QUOTED ON APPLICATION, ON ALL FERTILIZERS.

AGRICULTURAL LIME.

Especially prepared for agricultural purposes, and, being finely ground, it can be used in any broadcaster. Many plants and all grains show a decided increase and are greatly benefited by the use of lime, as it corrects all acidity of the soil, sweetening it and freeing it from impurities.

HOW TO TEST THE SOIL FOR ACIDITY.—Take a little soil from the field and place it in a saucer, moisten it well with water and place in it a little piece of blue litmus paper. If within twenty-four hours the litmus paper changes to a red color, the soil is acid and an application of lime should be added at the rate of from 1,000 to 2,000 pounds per acre.

For the ordinary piece of land that requires lime it will be found that once in the rotation of crops, or say once in four years, is as often as lime should be applied, as it will hold the land in its proper condition for that length of time. Price, 100 lb. bags, 60c.; ton, \$10.00.

GROUND LIMESTONE.

A finely pulverized high calcium agricultural limestone. Used in the same manner as Agricultural Lime, and preferred by many for correcting soil acidity. Is also largely used in place of Land Plaster. Price, 125 lb. bag, 50c.; ton, \$7.00.

BORDEAUX LIME.

Prepared expressly for use in making Bordeaux Mixture; is finely powdered, and ready for immediate use. Price, 100 lb. bags, \$1.00.

LAND PLASTER.

Price—Bag of 100 lbs., 75c.; ton, \$14.00.

Prices subject to change without notice. (See note on inside first cover.)

Inoculate Peas and Beans, Clovers, Cow Peas, Soy Beans, Vetches and all other legume crops with

MULFORD CULTURES FOR LEGUMES.

Small Cost.

Large Returns.

Easy to Use.

No Labor Expense.



Mulford Cultures contain pure, tested strains of active, vigorous nitrogen-fixing bacteria, for inoculating seeds of legumes or soil. Enormous numbers of these very valuable and desirable bacteria are thus available to you in every package of Mulford Culture and may readily be applied to your seed. The sealed bottle insures purity.

**Increase Your Crops.
Improve Your Soil.**

Legumes offer the best-known means of maintaining soil fertility and rejuvenating over-cropped and worn-out fields. They add both humus and nitrogen to your soil and thus increase your yield of grain and other non-legume crops.



PRICE.

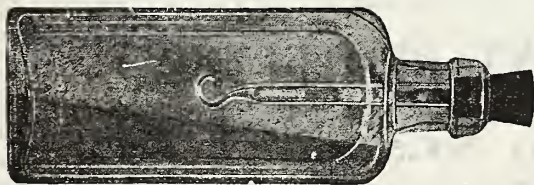
5 acre size ("a dollar per acre"), \$5.00; 1 acre size, \$1.50; 1-4 acre size, 50 cents; small size (supplied only in 4 varieties, for garden peas, garden beans, lima beans and sweet peas), 25 cents.



To Secure Better Results with

Sweet Peas, Garden and Field Peas, Garden Beans,
Soja Beans, Cow Peas, Clover, Alfalfa,
and other legumes,

USE FARMOGERM.



Farmogerm is a pure culture, or growth of nitrogen-fixing bacteria that have been selected and bred up to transform large amounts of nitrogen from the air into soluble nitrates.

Unless the soil is very acid or wet (in which case it should be drained and limed), Farmogerm will:—

Increase the yield and quality of legume crops, giving quicker growth and earlier maturity.

Increase the food value of legumes.

Make legumes grow in new localities where they cannot otherwise be grown successfully.

Supply nitrates to other crops growing with the inoculated legume crop.

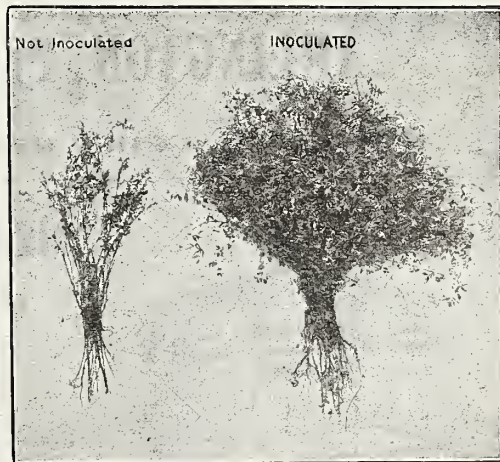
Enrich the soil for future crops.

In ordering Farmogerm be sure to state which legume you wish to use it with.

PRICE (in glass bottle).

5 acre size, \$7.50; 1 acre size, \$2.00; garden size, 50 cents.

Prices subject to change without notice. (See note on inside first cover.)





STERLINGWORTH PLANT TABLETS

A NEW INVIGORATOR FOR HOUSE PLANTS AND VEGETABLES

STERLINGWORTH PLANT TABLETS are a clean, odorless, concentrated, plant stimulant and invigorator. Their use promotes healthy, vigorous leaves and branches, and insures beautiful, luxuriant flowers. They build up the soil scientifically, and make frequent renewal of soil less important. The large amounts of waste matter in what is commonly known as "liquid manure," and "bone plant foods," which pollute the soil, and are many times accompanied by disagreeable odors, are absent in these excellent stimulating tablets. If you want luxuriant, healthy plants, ferns and beautiful flowers, these tablets are just what you are looking for.

PRICES: Large box (250 tablets) sufficient 35 plants 8 months, **50c** postpaid medium, (100 tablets) sufficient for 35 plants 3 months, **25c** postpaid; trial size, 10c.



BOWKER'S PLANT FOOD.

For Stimulating Growth and Rapidly Developing the Plant Organism.

15c. and 25c. per package.

TOMATO AND PLANT SUPPORT.

Designed especially to protect tomatoes,
peonies, small shrubs and
tall growing plants.

THE BARTLETT.

MADE FROM HARD WOOD, WITH WIRE HOOPS

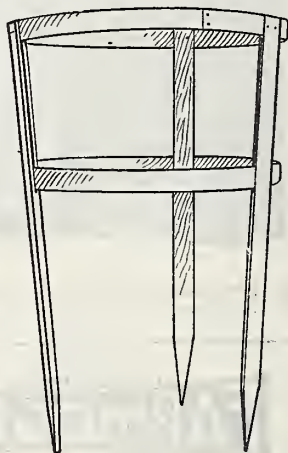
Price, 30 cents each; \$3.00 per dozen.



BARTLETT.

THE BRYANT.

MADE OF HARD WOOD STANDARDS AND WOOD
HOOPS.



BRYANT.

Price, 20 cents each; \$1.75 per dozen.

ARLINGTON PLANT PROTECTOR.

Price, 15 cents each; \$1.50 per dozen.

BIRD CAGES, SEEDS AND SUPPLIES.

Brass and Japan Bird Cages,

—ALSO—

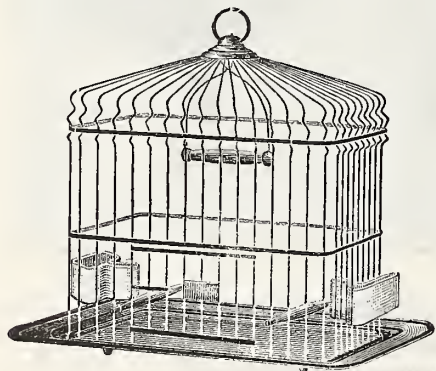
Parrot and Squirrel Cages.

CANARY SEED, RAPE, MILLET, HEMP, RICE, SUNFLOWER AND CUTTLEFISH.

Prepared Mixed Canary Seed.

GRAVEL, SONG RESTORER, PARROT FOOD AND MOCKINGBIRD FOOD.

Cage Springs, Cups, Hooks, Ladder Chains and Wire Guard Cloth.



Prices subject to change without notice. (See note on inside first cover.)

STANDARD FLOWER POTS.

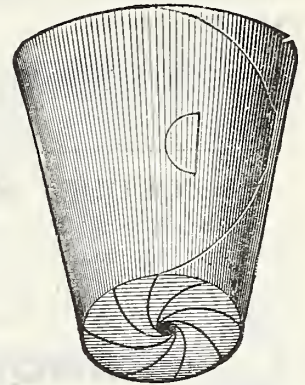


Inches.	Pots. Per dozen.	Saucers. Per dozen.
2	\$.15	
2½	.20	
3	.30	\$.25
3½	.35	.25
4	.40	.30
5	.70	.40
6	1.00	.55
7	1.65	.75
8	2.50	1.00
9	3.60	1.35
10	5.00	1.65
11	7.00	2.00
12	10.00	2.50
14	14.00	3.25

Measurement from inside to inside. Width and depth equal.

NEPONSET PAPER FLOWER POTS.

Manufactured from fabric which gives them all the necessary rigidity. They are unbreakable and give ample drainage.



Size.	Per doz.	Per 100.	Per 1,000.
2½	.10	\$.40	\$ 3.60
2½	.12	.45	4.20
3	.15	.65	6.10
3½	.18	.90	8.30
4	.20	1.00	10.00
5	.25	1.85	16.75
	.35	2.50	23.00

ROUND SEED AND BULB PANS.

Inches.	Each.	Per doz.
6	\$.10	\$1.00
7	.15	1.50
8	.25	2.50

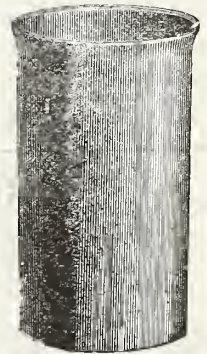
Inches.	Each.	Per doz.
9	\$.35	\$3.50
10	.45	5.00
12	1.00	10.00

Special quotations to florists.

FLORISTS' VASES.

FOR DISPLAYING CUT FLOWERS.

No.	8 inches in diameter, 13 inches deep	Each.
0	8 inches in diameter, 13 inches deep	\$1.65 each.
1	5½	1.35
2	4½	1.15
3	4	.95
4	3	.75
00	9	5.85
01	7	3.15
11	5½	1.80
22	4½	1.40
33	4	1.15
44	3	.95



FIBRE FLOWER POT SAUCERS.

No moisture passes through to injure table, floor or carpet.

TRELLISES.

Bow TRELLIS.

No.	Each.	Per doz.
0. 0½, 24x 7½ in	\$.35	\$ 4.00
1, 30x10 in	.45	5.00
2, 30x14 in	.70	8.00
3, 36x12 in	.80	9.00
3½, 42x14 in	.90	10.00
4, 48x15 in	.95	11.00
5, 60x18 in	1.25	14.00
6, 72x20 in	1.40	16.00

FAN TRELLIS.

No.	Each.	Per doz.
1½ feet, width at top 6 inches	\$.25	\$2.50
2 " " " 10 " "	.30	3.00
2½ " " " 13 " "	.40	4.50
3 " " " 16 " "	.80	9.00
3½ " " " 21 " "	.85	10.00
4 " " " 27 " "	1.10	12.50
5 " " " 32 " "	1.40	16.00
6 " " " 38 " "	1.55	18.00
7 " " " 42 " "	1.70	20.00
8 " " " 46 " "	2.10	24.00



VERANDA
TRELLIS.

No.	Each.	Per doz.
00, 18-in. stick, 3½ in. wide	\$.15	\$1.50
" 00 wide, 20-in stick, 8 in. wide	.20	2.00
" 0, 24-in. stick, 5 in. wide	.20	2.00
" 0 wide, 24-in. stick, 8 in. wide	.30	3.00

VERANDA TRELLIS.

No.	Each.
2 ft.	\$.60
3 ft.	.65
4 ft.	.85
5x1½ ft.	1.25
6x1½ ft.	1.50
7x1½ ft.	1.75
8x1½ ft.	2.00
9x1½ ft.	2.35
10x1½ ft.	2.65
11x2 ft.	3.00
12x2 ft.	3.35

Prices subject to change without notice. (See note on inside first cover.)

PLANT STICKS.

From one and one-half to six feet in length, used for supporting single stalks of roses, dahlias, etc.

	Per doz.	Per 100.
1½ feet, painted green.....	\$.20	\$1.50
2 " " ".....	.30	2.25
2½ " " ".....	.45	3.50
3 " " ".....	.70	5.50
4 " " ".....	.95	7.50
5 " " ".....	1.25	10.00
6 " " ".....	1.50	12.00

WOOD POT LABELS.

	PLAIN. Per 1,000.	PAINTED. Per 1,000.
4 inch.....	\$.60	\$.90
4½ inch.....	.70	1.00
5 inch.....	.85	1.15
6 inch.....	1.10	1.45

WOOD TREE LABELS.

3½ inch (copper wire), painted....	\$1.50
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BOUQUET HOLDERS.

No. 1. Small, iron.....	Each, 25 cents
No. 2. Medium, iron.....	Each, 35 cents
No. 3. Large, iron.....	Each, 40 cents

FOLDING LAWN SETTEE.

Made from hard wood and finished in varnish and vermilion, or green.

Price, \$1.15.

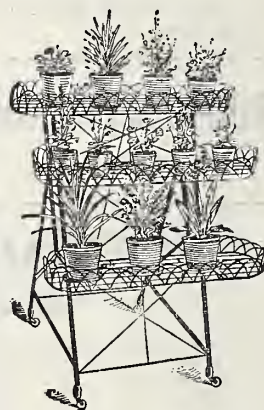
CROQUET.

We carry a complete assortment, manufactured from selected hard wood, handsomely painted and varnished.

\$1.75 to \$4.00 per set.

WIRE PLANT STANDS.

1 shelf, folding,	\$2.25
2 " " "	3.00
3 " " "	4.00
4 " " "	5.25

**TROWBRIDGE'S GRAFTING WAX.**

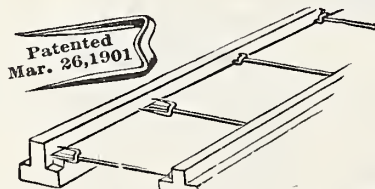
The finest quality made, put up in neat packages with directions for use.

30c. per lb.; ½ lb. packages, 18c.; ¼ lb. packages, 10c. By mail, 6c. per lb. extra.

BLAKE'S GRAFTING WAX.

In 1 lb. packages only. 30c. per lb. By mail, 6c. per lb. extra.

BEESWAX, 45c. per lb. By mail, 6c. per lb. extra.

"PEERLESS" GLAZING POINTS.

Made from galvanized steel wire; are cheap and indestructible. Easy to apply and perfectly satisfactory to use. Per 1,000, 75 cents; by mail 80 cents.

Hotbed Thermometer. Highest grade, and very accurate. Made with wooden frame, and equipped with brass point to thrust into the soil. \$2.00 each.

Self-Registering Thermometer. Registers accurately the coldest, also the warmest point of temperature. \$3.25 each.

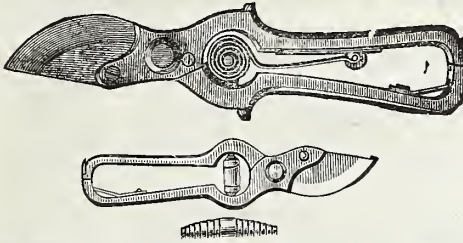
Hotbed Mats. Best rye straw, 6 x 6 feet. \$1.75 each.

Tinfoil. For bouquets. Lb., 20 cents.

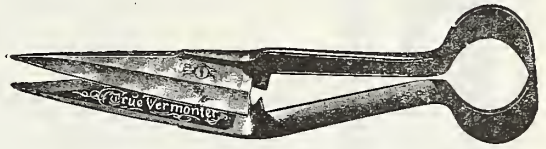
Twine, Soft. For tying vines, etc. Large ball, 30 cents.

Tarred Yarn. Good strong material for raspberries, shrubs, etc. Lb., 30 cents.

Prices subject to change without notice. (See note on inside first cover.)

PRUNING SHEARS.

American	50c. to \$1.00
French wheel spring, 8 in.....	2.00
French wheel spring, 9 in.....	2.25
French wheel spring, 10 in.....	2.65

SHEEP SHEARS.

True Vermonter, 5½ inch, \$.85

True Vermonter, 6 inch, 1.00

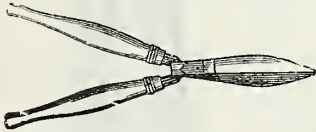
GRASS SHEARS.

Sheep shears style, for trimming grass, 25 to 65 cents.

Lightning shears style, for trimming grass, 40 cents.

**HEDGE SHEARS.**

8 inch.....	\$1.95
9 inch.....	2.25
10 inch.....	2.60

**BORDER SHEARS (Long Handle).**

9 inch	\$3.00
9 inch—with wheel.....	3.50

LAWN SHEARS (Long Handle).

9 inch	\$3.50
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"JIMMY" WEEDER.

Roots out Dandelions, Plantains, Russian Thistle, and other weeds.

Pulls tap root and all without disturbing the sod.



Price, 25 cents.

The P-W Hand Weeder.

A light and easy working weeder. Excellent for general weeding purposes, doing the work easier and quicker than by ordinary methods.

Price, 25 cents.

Lang Weeder.

Equipped with strap, which allows free use of the hand without dropping the weeder.



Price, 25 cents.

HAZELTINE WEEDER.

Price, 30 cents.

GRAFTING CHISEL.

Price, 65 cents.

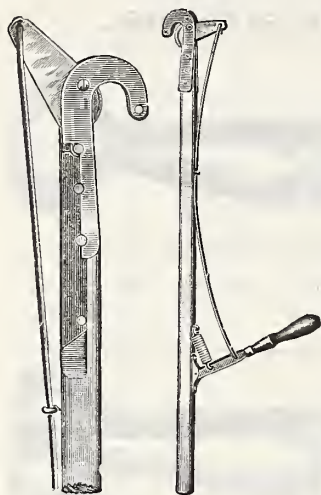
EXCELSIOR WEEDER.

This instrument will work well among rows of seedlings and ornamental plants, or in any place where freedom from weeds is desired.

Price, 10 cents.



Prices subject to change without notice. (See note on inside first cover.)



STANDARD TREE PRUNER.

Is the lightest device made for the purpose.

Will cut as large wood as any other device that is practical to handle.

Will clip the slightest twig on the extreme end of the limb.

Price.

8 feet	\$1.25	14 feet	\$1.65
10 feet	1.30	16 feet	1.75
12 feet	1.40	Extra blades . . . . .	.15

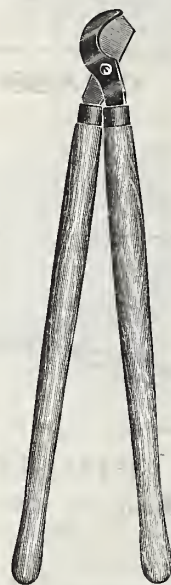
CLYDE IMPROVED DRAW CUT PRUNER.

Solid steel blade and hook. Positive draw cut. Hand forged, with four-inch pressed steel ferrules and caps.

Price.

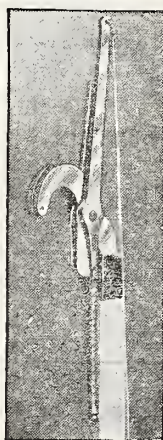
No. 5400. 24-inch handles	\$2.80
No. 5401. 22-inch handles	2.35

ROCKDALE PRUNER.



Price.

No. 35, 26 in. long.	\$1.75
No. 38, 41 in. long.	2.25



KING PRUNER.

WITH ROPE PULL.

No danger of receiving shock by crossing electric wires, as they are operated by a cord running the entire length of pole. These pruners are made from a fine quality of steel and carefully tested, the cutters are concaved, making the easiest cut possible, and can readily be taken apart for grinding, etc.

Price.

12-foot pole	\$1.35
14-foot pole	1.50
16-foot pole	1.60
18-foot pole	1.85
20-foot pole	2.00

PRUNING SAWS.

MADE FROM BEST QUALITY STEEL, WITH HARD WOOD HANDLES.



No. 40.



No. 16.

No. 40. 18-inch polished steel blade, with double sawing edge, **75 cents.**

No. 40. 20-inch polished steel blade, with double sawing edge, **85 cents.**

No. 16. Steel frame, with adjustable steel blade, **\$1.65.**

This style saw is especially desirable for use in narrow spaces.

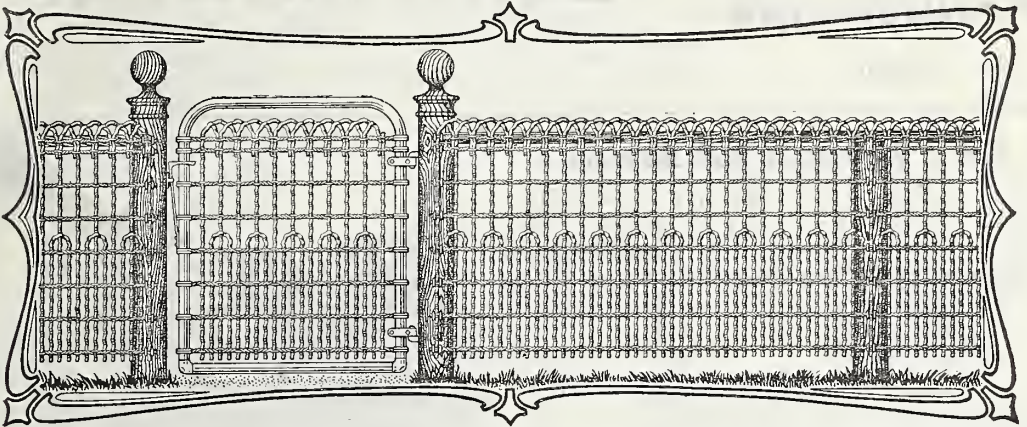
ASPARAGUS KNIFE.



Valuable, not only for cutting asparagus, but for cutting out all deep-rooted weeds from the lawn, such as plantain, thistles, dandelion, etc.

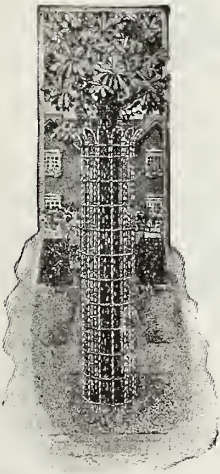
Price, 35 cents.

Prices subject to change without notice. (See note on inside first cover.)

WAUKEGAN-CYCLONE SANITARY WIRE FENCING.

Style "F" fabric shown above on ordinary wood posts opens up the yard to fresh air and sunlight, creates healthy playgrounds out of unsanitary back yards and makes gardens, flower beds, lawns, etc., possible. Pickets are all No. 9 heavily galvanized wire, spaced $2\frac{3}{4}$ inches apart at top, $1\frac{1}{2}$ at bottom, making fence absolutely chicken-proof.

STYLE "F" FABRIC, Three Sizes, 36, 42 and 48 inches high.



CYCLONE TREE GUARD.

Furnished with spiral spring, ready for setting up by clasping hooked ends.

Protects the tree without shading, rubbing or bruising the bark.

Made 6 feet high, of heavily galvanized wire.

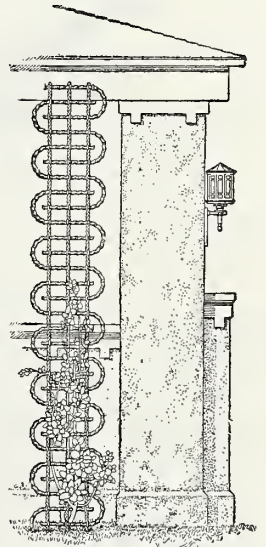
9 inches in diameter.

CYCLONE SINGLE TRELLIS.

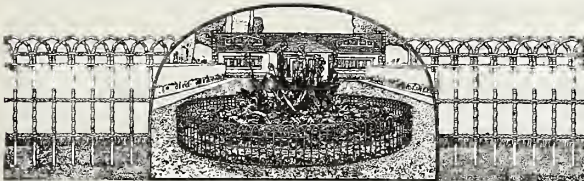
The most practical trellis made for climbing vines and flowers.

Easily placed in position. Cut to any length. Can be used for years, making an extra, low priced trellis that adds to the beauty of porch and home.

18 inches in width.



PERFECTION FLOWER GUARD.



Affords ample protection against dogs, cats, chickens, etc., besides keeping children from running over flower beds. Fits any shape or size of flower bed. No posts necessary. Picket ends are left straight for inserting in the ground. Pickets No. 9, cables No. 13 heavily galvanized wire.

Two sizes, 16 and 22 inches high.

Price on application.

UNIVERSAL GARDEN GATES.

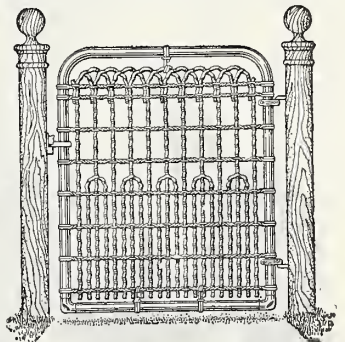
These are low-priced, strong, practical, and durable.

Choice of 36, 42 or 48 inch heights.

3 foot opening.

Write for prices on Garden Gates.

Also on 8, 10, 12, 14 and 16 foot Farm Gates.



Prices subject to change without notice. (See note on inside first cover.)

Pennsylvania

Quality

LAWN MOWERS.

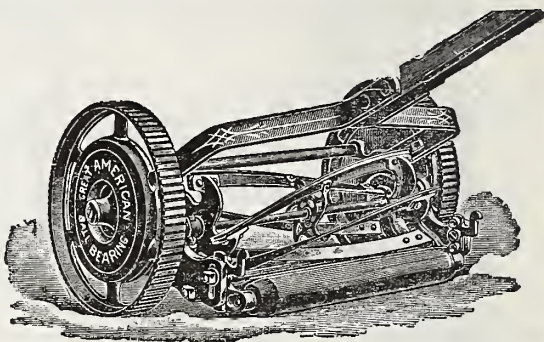
By "Pennsylvania Quality" is meant absolutely the best that can be put into lawn mower construction. All blades are crucible tool steel, oil tempered and hardened, and all castings are reamed and machined to fit perfectly, insuring easy cutting and long life.

Great American Ball Bearing.

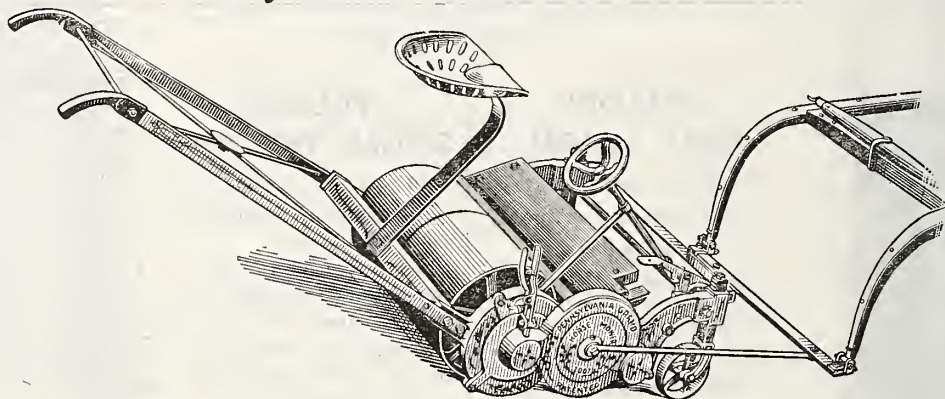
This machine is one of the most popular of the line and consequently is more imitated than any other lawn mower manufactured. **Raised edge, self-sharpening** lower knife, highest grade ball bearings, smooth running, are special features.

10-inch driving wheels. 5 blades.

Sizes.	Prices.
15 inch	\$15.00
17 inch	16.00
19 inch	17.50
21 inch	19.00



Pennsylvania Grand Horse Mower.

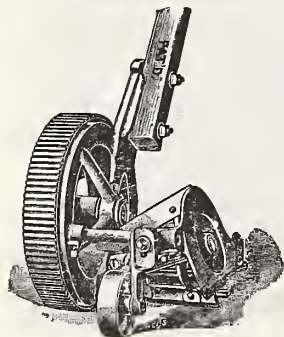


Any product of the Pennsylvania factory insures it being of the highest quality, both in material and workmanship. Until a few seasons ago the factory made only one style of horse mower, that with the lower knife adjustable to the revolving cylinder, similar to the majority of other horse and hand mowers, but recently they perfected and patented a new design, radically different from all others. The lower knife is rigidly bolted to the frame, and set to cut $\frac{3}{8}$ inches from the ground, while the cylinder is adjustable for taking up the wear. The height of the cut can be regulated from $\frac{3}{8}$ to $2\frac{7}{8}$ inches, by the wheel at the right of the machine. This new mower is called the Pennsylvania Grand.

Complete with seat, shafts, etc., as illustrated.

Write for Price List.

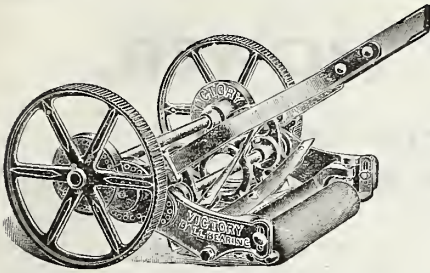
Pennsylvania B. B. Under Cut Trimmer.



This machine is the only one to successfully replace the use of hand shears. The slanting side plate and conical cylinder make it possible to cut all the grass left by the regular style of lawn mower. The unique construction of the **Under Cut Trimmer** permits cutting, not only close up to a wall, fence, trees, etc., but it will get the grass **under** a fence or rock-cut base of tombstones, house foundations, and other places hitherto out of reach of anything but hand shears. For cemeteries it has the special advantages of not **marking** or **smudging** the stones, as the side plate does not come in contact with the stone above the grass line.

Price, \$9.00.

Prices subject to change without notice. (See note on inside first cover.)



TOWNSEND'S "VICTORY" LAWN MOWER.

Constructed with ball bearings, of the very highest grade. Triple gear, entirely closed, and a removable cutter bar, which, by loosening four small screws, may be rolled out of the machine for sharpening without disturbing the frame.

Width of cut.	14-in.	16-in.	18-in.	20-in.	22-in.	24-in.
Net price:	\$16.00	\$17.00	\$19.00	\$21.00	\$23.00	\$24.00

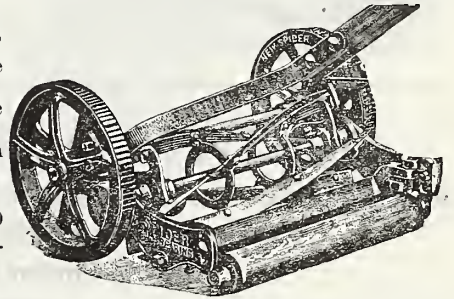
TOWNSEND'S "SPIDER" LAWN MOWER.

Like the "Victory," the "Spider" runs and cuts with ease and rapidity.

It is light, strong, and finely made and adjusted, and is one of the best *medium priced* lawn mowers ever offered.

Is ball bearing, has nine-inch wheels, four-bladed, open wiper, and a simple and easy adjustment.

Width of Cut.	14-in.	16-in.	18-in.	20-in.
Net price:	\$12.00	\$13.00	\$14.00	\$15.00



Townsend's Chain Roller Mower.

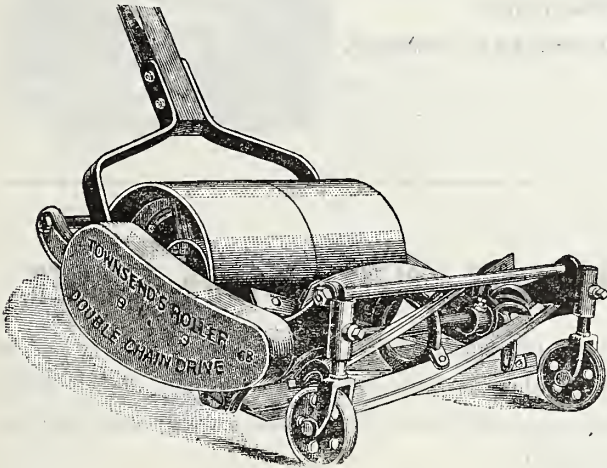
Designed for Borders and Golf Greens.

Ball bearings of the very highest grade, double driving rolls, eight inches in diameter, sextuple ratchet, almost silent and indestructible, chain drive light, strong, quiet and easy, and *completely shielded*.

This mower will cut close enough and clean enough to satisfy the most fastidious golfer, and it will run easier and will stay in perfect order longer than any other golf mower.

Sizes, 12-inch, 14-inch, 16-inch, 18-inch.

Price on application.



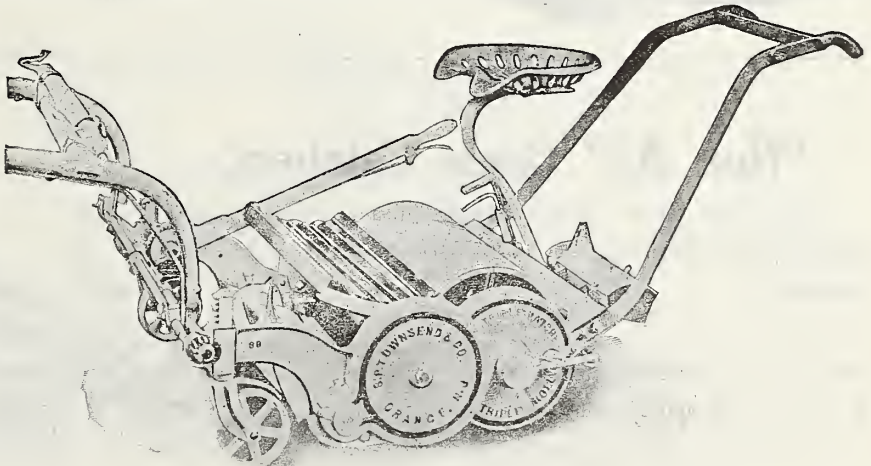
THE TOWNSEND HORSE LAWN MOWER.

The Townsend Mower has triple rolls, with triple pawls in each roll, making a most powerful and instantaneous driving mechanism. Unlike other mowers, the motion of the blades is maintained even when turning sharp corners. The self-aligning journal boxes will be found in this mower only, and prevent cramping, a very common fault in horse lawn mowers.

All machines are fitted complete with tool-box, seat, handles, shafts, and slide-bar attachment, which keeps the horse on the cut grass.

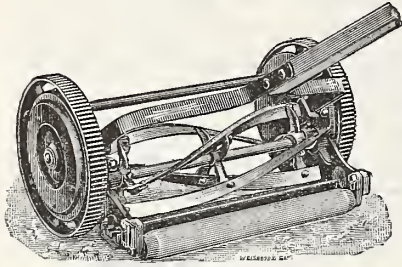
Width of cut, 30 in., 35 in., 38 in.

Write for Price List.



Prices subject to change without notice. (See note on inside first cover.)

FEDERAL LAWN MOWER.



8-INCH WHEELS.

THE COMBINED POINTS ARE PRICE, SIMPLICITY, DURABILITY, UTILITY.

Width of Cut.	Net Price
14 inch	\$6.00
16 inch	6.25
18 inch	6.50

SPEEDY LAWN MOWER.

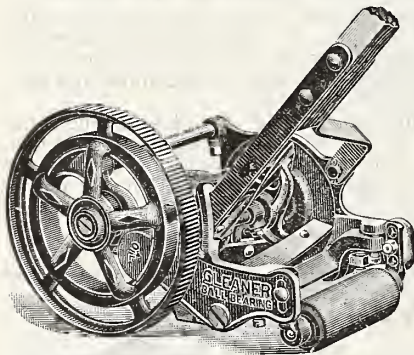
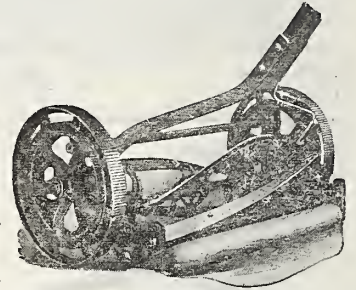
9-inch wheels, with raised rim.

Four-blade cutting reel.

Dust-proof ball-bearings.

Durable and easy running.

Width of Cut.	Net Price.
16 inch	\$8.00
18 inch	8.75



TOWNSEND'S "GLEANER" LAWN TRIMMER.

Does what lawn mowers leave undone. Trims and edges the lawn with remarkable speed and perfection. 9-inch wheel, ball-bearing; 4 steel blades, 8-inch cut. Strictly high grade in every particular.

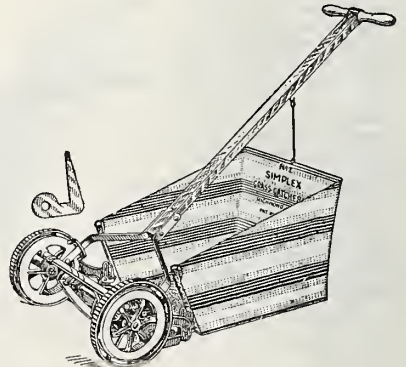
Price, \$6.50.

"Nox All" Grass Catchers.

Will fit any mower made. Instantly attached and detached. Canvas body, galvanized iron bottom, combining strength with lightness.

Price.

No. 1, for 12, 14 and 16-inch mowers	\$1.60
No. 2, for 16, 18 and 20-inch mowers	1.85



Prices subject to change without notice. (See note on inside first cover.)

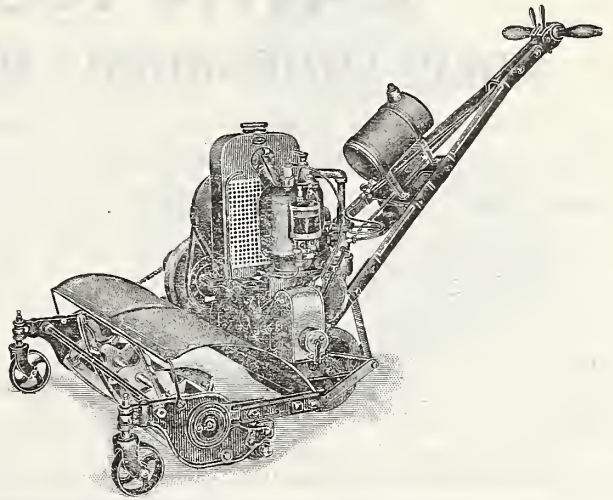
Fuller & Johnson Motor Lawn Mower.

The Motor Lawn Mower represents the highest development in lawn mowing equipment, both from the standpoint of its practicality for every-day use and of combining, as it does, large cutting capacity with great flexibility, enabling the operator to do a beautifully finished job at each cutting without the necessity for any clean-up work afterwards with a hand lawn mower—all with the greatest possible ease. It is at once a labor-saving device and a lawn beautifier. It simplifies, economizes and makes possible far better results than have ever before been possible.

There are various types of horse mowers and automobile mowers with large cutting capacity, but such mowers are useful only for cutting large open areas, without obstacles of any kind, where straight-away cutting is all that is required, but such cases are comparatively rare.

What has been needed for a long time is a practical motor-driven hand-controlled lawn mower with great flexibility, making it possible to cut close up to and around trees, under shrubbery and along walks and driveways, while at the same time having a mowing capacity of four or five acres per day. The Fuller & Johnson Motor Lawn Mower fulfills these requirements.

The Motor Lawn Mower will enable you to have a better and more perfect lawn at less expense of upkeep. It will give you a better job at each cutting and will enable you to have your lawn mowed more often, for it is not only a time saver but a labor saver as well, requiring, as it does, no propelling effort on the part of the operator except in guiding and directing the machine. A rolling or hilly lawn dotted with trees and shrubbery and traversed with walks and driveways holds no terrors for this machine. In fact, there is no mowing equipment which will meet these conditions so satisfactorily and with such ease of operation as this wonderful Motor Lawn Mower.



SPECIFICATIONS.

Width of cut, 25 inches.
Diameter of cutter reel, 6½ inches.
Four revolving knives, crucible steel, 1¼ inches wide.
Bed knife, tool steel cutting edge.
Wooden roller, 2½ inches in diameter.
Side frame, malleable iron.
Traction drum, wrought steel.
Handle, heavy wrought steel, full braced, 4 feet long.

Cut adjustment, ½ to 2 inches.
Cutting speed, 2 to 3 miles per hour.
Cutting capacity, 5 acres per day.
Climbs 35 per cent. grade.
Gasoline consumption per day, about one gallon.
Length over all, 6¼ feet.
Weight, 245 pounds.
Shipping weight (crated), 320 pounds.

MOTOR.

Single cylinder, four cycle, enclosed, water cooled, radiator system.
Bore, 3-inch.
Horse power, A. L. A. M. rating, 3½.
Stroke, 3-inch.

Speed of motor controlled by governor.
Ignition by high tension magneto.
Traction roller and cutter reel controlled by separate expanded ring clutches.

PRICE, \$275.00.

MANUFACTURER'S WARRANTY.

We warrant each new Fuller & Johnson Motor Lawn Mower manufactured by us to be first-class in material and workmanship, to be in perfect running order when leaving the factory and to run properly if given reasonable care and attention.

We furthermore warrant each Fuller & Johnson Motor Lawn Mower to be free from defects in material and workmanship, and will replace, free of charge, at our factory any parts proving defective in material and workmanship, within one year of date of purchase, upon the defective part being delivered to us for inspection to factory, at Madison, Wis., transportation charges prepaid.

It is understood that we are not to be held responsible for the failure of the Motor Lawn Mower to operate successfully if the instructions furnished with the machine are not followed nor for injury due to accident, carelessness or abuse.

Prices subject to change without notice. (See note on inside first cover.)

LAWN ROLLERS.

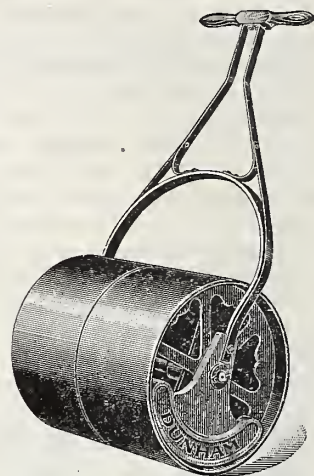
DUNHAM "WATER-WEIGHT" ROLLER.

The Dunham "Water-Weight" Roller is electric welded, making the water section one solid drum. No rivets are used. It cannot leak. The rolling surface is perfectly smooth and cannot cut up the lawn. They are roller bearing and easy to operate.

Made in one or two sections.

No.	Diameter Inches.	Length Inches.	Sections.	Weight Empty.	Filled with Water.
WB 5	18	24	1	80 lbs.	310 lbs.
WB 7	24	24	1	115 lbs.	500 lbs.
WB 11	18	24	2	100 lbs.	330 lbs.

NOTE.—For lawns varying from 25 x 40 feet to 50 x 200 feet we recommend WB 5 or WB 7, as listed above. They are the standard sizes.

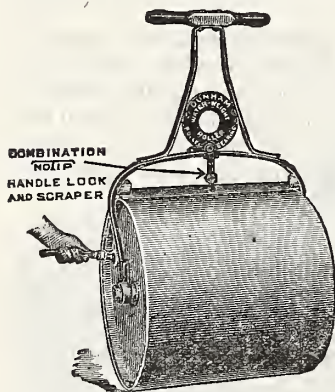


DUNHAM IRON ROLLER.

Outer edges beveled. Steel axles perfectly fitted in machined bearings assure perfect alignment and ease in using.

Iron Handle with Counterweight. The only lawn roller made with a handle that is absolutely rigid and that will remain so.

No. 1 and No. 2 do not have handle counterweight.

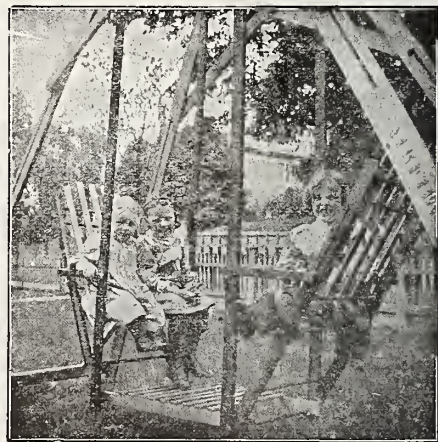


No.	Sections Each.	Inches Long.	Inches Diam.	Weight.
2	2	16	20	200 lbs.
4	2	20	20	250 lbs.
7	2	24	20	300 lbs.
9	2	20	24	400 lbs.

Price on application.

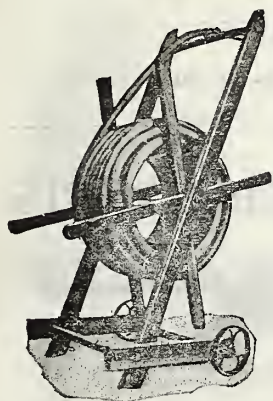
THE FAIRFIELD LAWN SWING.

This swing easily takes precedence over all others in the market. Made of clear mountain spruce. Mechanical perfection, durability and ease of operation are combined in its construction.



<i>Favorite</i>	} <i>Price quoted on application.</i>
<i>Fairfield No. 2</i>	
<i>Fairfield No. 5</i>	
<i>Fairfield No. 7</i>	

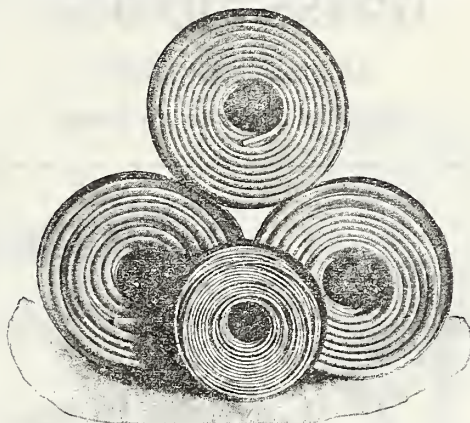
Prices subject to change without notice. (See note on inside first cover.)

HOSE REELS.

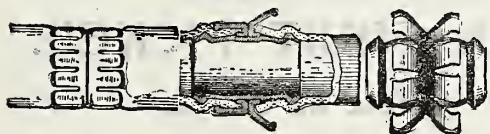
Made from hard wood or with steel frame. Strong, well bolted together, and durable.

Price.

\$1.00 to \$1.50.

Garden and Lawn Hose.

High Grade Rubber and Cotton Hose.
All sizes. Prices on application.

PERFECT HOSE MENDER.

A one-piece article of solid brass, made of very best quality of material, with tube and clamps stamped out in one piece, making a continuous tube. All that is needed is a hammer to bend down the clamps on the hose to make a perfect mend. The mend is neat, smooth, durable and absolutely water tight.

Made for both $\frac{1}{2}$ -inch and $\frac{3}{4}$ -inch hose.

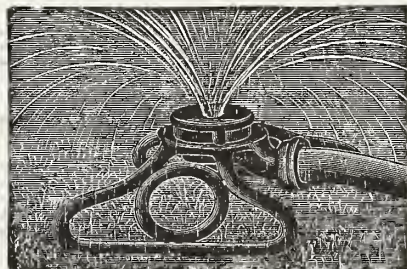
Price, 10 cents each.

THE "ELGIN" LAWN SPRINKLER.

This sprinkler, with ordinary pressure, distributes water over a diameter of about twenty-five feet with no back pressure on hose. It is also furnished with an attachment to throw all the water to one side, so that the sprinkler can be put close to walk or house.

Price, 60 cents.

Complete with attachment, 70 cents.

**Fountain Lawn Sprinkler.**

Made of brass. Easily moved over the lawn without turning off the water.

Price, 75 cents.

Water Sprinkler.

1 qt. painted tin,	\$.50
2 " " "	.55
4 " " "	.85
6 " " "	1.00
8 " " "	1.25
4 " galv. iron,	.90
6 " " "	1.10
8 " " "	1.25
10 " " "	1.45
12 " " "	1.65
16 " " "	2.20



All our sprinklers are made with movable heads, which unscrew with an eighth turn. The screw is of zinc and will not rust.

PARLOR SPRINKLERS (with long nose).

1 quart, painted tin..... 50c. 2 quart, painted tin..... 55c. 3 quart, painted tin 85c.

Prices subject to change without notice. (See note on inside first cover.)

GRASS HOOKS.

All sizes. All kinds.

Price, 35 cents to 50 cents.

FLORAL TOOLS.

IN SETS.

From 10 cents to \$1.40 per set.



Garden Reels.

Price, \$1.25.

Garden Lines.

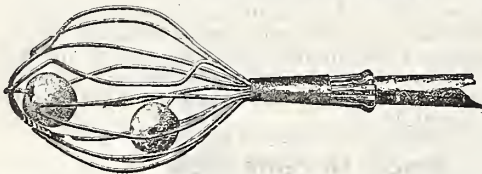
Price, 100 feet long, 70 cents.

CAST STEEL GARDEN TROWELS.



Prices.

6-inch Primrose	10 cents
6-inch extra solid steel blade and shank	60 cents
7-inch extra solid steel blade and shank	65 cents

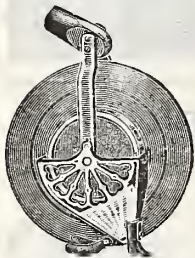


WIRE FRUIT PICKER.

Price, 50 cents.

BOSTON HOSE NOZZLE.

Price, 60 cents.



The Eureka Seed Drill.

For Kitchen Garden
and Hotbed.

Will sow and cover beets,
cabbages, carrots, celery, let-
tuce, onions, radishes, spinach,
turnips, etc.

Price, \$1.25.

IWAN POST AUGER.

Will do three times the work of any
other auger on the market.

Price.

4-inch	\$2.00
6-inch	2.00
8-inch	2.25



PICKS AND MATTOCKS.

Axe Mattock.



Price, \$1.50.

Pick.



Price, \$1.50.

Pick Mattock.

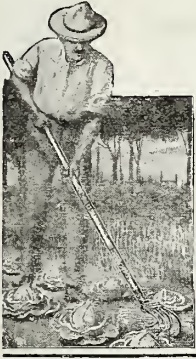


Price, \$1.50.

Prices subject to change without notice. (See note on inside first cover.)

"NORCROSS" CULTIVATOR-HOES AND WEEDERS.

"No Garden too Small for a 'Norcross' Tool."



Use on 4-foot Handle as shown in cut.



Use on Handle or Attach to a Wheel Plow.



Attach 5-Prong Style to Wheel Plow.

"Norcross" Cultivator-hoes and Weeders work closer to plants without injuring them than any other garden implement known, leaving the soil level, loose and untrampled. Detachable steel prongs, malleable head. Finish black, silver bronzed shovels. Handles finest grade ash.

5-Prong, 4-Foot Handle, Weight 3 Pounds, Price, \$1.00.

The "Norcross" 5-prong is the only cultivator-hoe having detachable ferrule whereby handle may be detached, and by means of "Norcross" universal connection (10 cents extra) cultivator may be used as a wheel plow attachment.

3-Prong, 4-Foot Handle, Weight 2 Pounds, Price, 85 cents.

The "Norcross" 3-prong is a modification of the 5-prong, in size, weight and price, being especially suited to women who tend garden and all who prefer a light weight tool and for cultivating between extremely narrow rows.

"Midget," 9-Inch Handle, Weight 12 Ounces, Price, 40 cents.

The "Norcross" Midget is unequalled for close cultivation in flowers, low shrubbery and garden. Unlike cheaply made one-piece malleable weeder, it is made and finished the same as our cultivator-hoes.

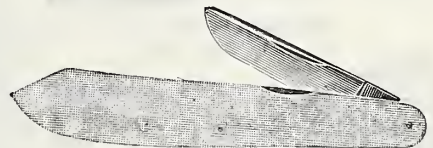
PRUNING AND BUDDING KNIVES.

All knives thoroughly well made; strong handle, extra quality steel blades.



PRUNING KNIFE.

Price, 60 cents to \$1.00.



BUDDING KNIFE.

Price, \$1.00.

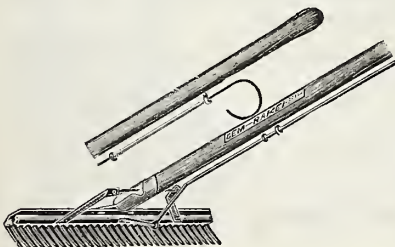
The Gem Dandelion Rake.

The Perfect Dandelion Header and Self-Cleaning Lawn Rake.

Note the fine, blade-like steel teeth slide close to the sod and clean up all dandelions quickly and easily, then the stripper, operated by light pull on finger hook, empties rake into basket. Will help the grass and greatly improves appearance of lawn.

Positively cannot tear or injure the sod.

No. 1, 16 inches wide.....	\$1.75
No. 2, 24 inches wide, and has sheet metal back.....	2.25



Prices subject to change without notice. (See note on inside first cover.)

FARM AND GARDEN TOOLS.

Complete Assortment of All Tools Constantly on Hand.



Field Hoe.



Manure Fork.



4 Tined Hay Fork.



Toothed Hoe.



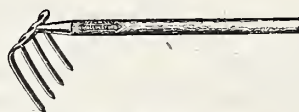
Spading Fork.



3 Tined Hay Fork.



Warren Hoe.



Potato Hook.



Turf Edger.



Steel Garden Rake.
(Bow Shank.)



Wire Lawn Rake.



Scuffle Hoe.



Steel Garden Rake.



D Handle Round Point Shovel.



Solid Steel Scoop.



D Handle Square Point Shovel.



Wire Potato Scoop.



D Handle Spade.

HOES—Garden, Field, Meadow, Scuffle, Ladies', Boys', Nurserymen's, Onion, Warren, Boothby, Humphrey, Stable, Street and Mortar.

FORKS—Hay, Barley, Manure, Spading, Ensilage, Coke, Fish, Potato and Stone Picking.

HOOKS—Potato, Manure, Clam and Nurserymen's.

RAKES—Garden, Lawn and Gravel, in steel, malleable iron and wire.

TURF EDGERS and SOD LIFTERS.

Write for quotations on tools of every variety.

Prices subject to change without notice. (See note on inside first cover.)

STEEL SHOVELS, SPADES AND SCOOPS.



Maynard's Solid
Steel Socket
Shovels and Spades.



Post
Spoon.



Long Handle
Square Point
Shovel.

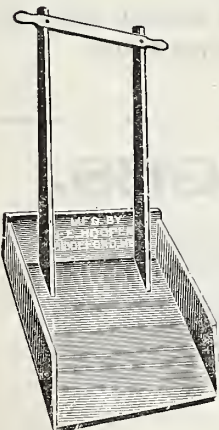


Long Handle
Round Point
Shovel.



Wooden
and
Steel
Snow
Shovels.

THE HOOPER SNOW SHOVELS.



For Railroad Cross-
ings and Platforms, Ice
Ponds, Mill Yards, Flat
Roofs, Concrete Walks,
and General Shoveling.

PRICE.

2 feet,	\$4.75
2 feet, 6 inches,	5.00
2 feet, 9 inches,	5.25



Cucumber Wood Pumps.

Pump Curbs, Pump Fixtures,
Tubing,
Chain and Rubber Buckets.

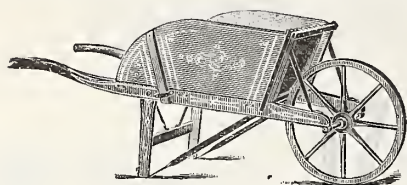
Finished Ox Bows.

Made from fine second growth
hickory, shaved by hand, and
smoothly finished.

PRICE.

Per Pair, 2 1/4 in.,	\$1.60
" " 2 in.,	1.50
" " 1 3/4 in.,	1.25
" " 1 1/2 in.,	1.15

Prices subject to change without notice. (See note on inside first cover.)

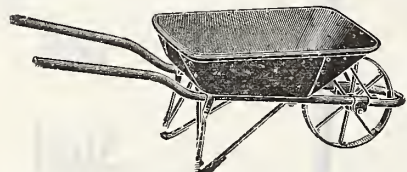


GARDEN BARROW.

WHEELBARROWS.

No. 64.	K. & W. Garden Barrow.....	\$6.25
No. 65.	“ “ “	6.50
No. 5.	Custom made Garden Barrow.....	7.50

CANAL BARROWS.

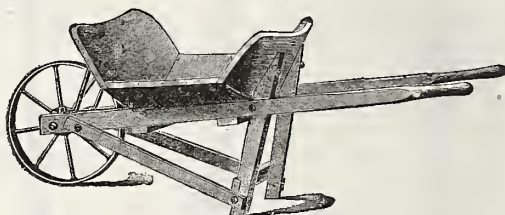


STEEL TUBULAR CANAL BARROW.

Wood Tray,
\$3.50, \$3.75

Steel Tray,
\$9.50

All Steel,
\$11.50

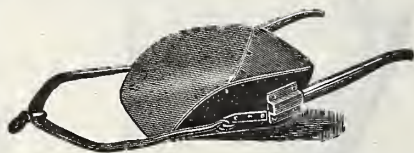


CANAL BARROW.

STEEL ROAD SCRAPERS.

Made of heavy steel plates, cut from a single sheet pressed cold, lapped and riveted at the corners, giving greatest strength where needed. Special steel is used in the bail, and they are hung so as to handle easily.

Heavy shoes or runners are used to stiffen the bottom, and all scrapers are shipped with runners, unless otherwise ordered.



Price on application.

STEEL HEAD FOR DRAG.



This illustration shows a simple device whereby a drag can be readily made by using STRAIGHT plank. We also furnish the drag complete as shown above.

Price on application.

CAST IRON HOG TROUGHS.



Price on application.

Prices subject to change without notice. (See note on inside first cover.)

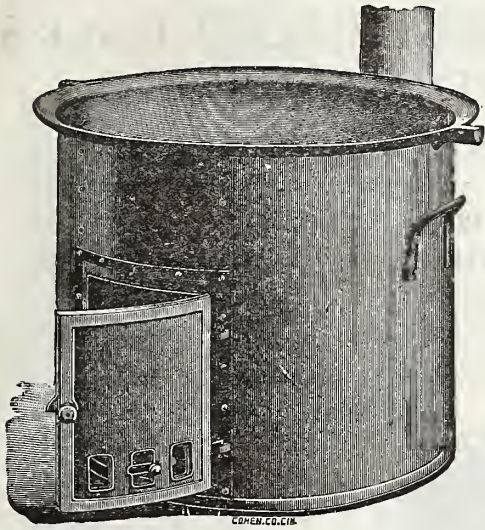
Farmers' Boiler and Feed Cooker.

(WOOD BURNING.)

Heavy cold rolled steel furnace; extra large feed door; malleable iron handles, firmly riveted on; strong, durable, economical and cheapest feed cooker on the market.

The kettles are of smooth, heavy cast iron, and will last a lifetime. The furnace jacket is of heavy cold rolled steel and very durable. Door, frame and flue collar cast iron.

Is designed to set on the ground, or on brick foundation and is especially adapted for cooking feed, rendering lard, making soap, scalding hogs and poultry, and all work of this nature. Cast-iron flues are constructed inside, retaining the heat and greatly economizing fuel.



Capacity.	Diameter of Furnace.	Capacity.	Diameter of Furnace.
15 gals.	20½ inches	53 gals.	32 inches
22 gals.	23 inches	65 gals.	34 inches
30 gals.	26 inches	75 gals.	36 inches
33 gals.	28½ inches	90 gals.	38½ inches
40 gals.	29½ inches	110 gals.	43 inches
48 gals.	31½ inches		

Price on application.

MOUNTED GRINDSTONES.

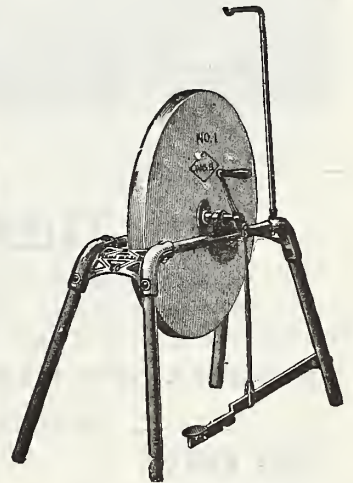
The "Goezy," Tango, Sampson and Tubular Frame,
WITH TREADLE AND CRANK TO WORK EITHER BY HAND OR FOOT.

Strong, Durable Frames.

— ALSO —

Unmounted Stones, all sizes and weights, and a full line of Fixtures.

Write for prices.



TUBULAR FRAME STONE.

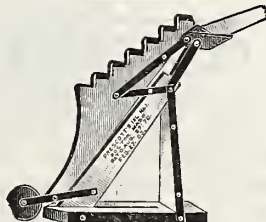
BARREL HEADER.

This is the most simple labor-saving machine ever invented for heading up barrels, and is used extensively for heading up apples, fish and other merchandise.



Price (1-inch screw). \$2.00.

CARRIAGE JACKS.



Price, \$2.25 to \$4.50.

STORE AND BAG TRUCKS.

MADE OF HARD WOOD AND WELL
IRONED.

RUBBER TIRED WHEEL
for hotel use.



Price, \$3.50 to \$10.00.

Prices subject to change without notice. (See note on inside first cover.)



Corner Manger.

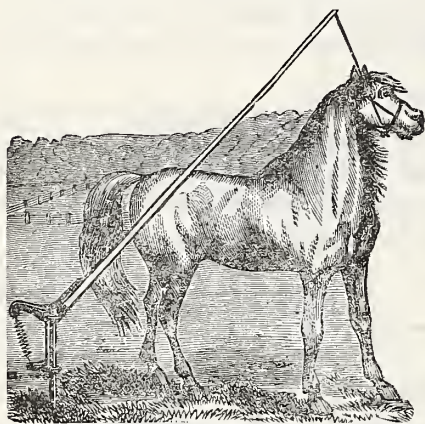


Feed Rack.

IRON CORNER FEED RACKS AND MANGERS.

WRITE FOR PRICES.

ANIMAL TETHER.



Price, \$3.50.

GALVANIZED IRON BUSHEL BASKETS.

These baskets are made of galvanized iron, and are furnished with malleable iron handles. Strong, durable and useful.



Price, \$1.75.

FEED BAGS.

MADE FROM
HEAVY CANVAS.

PLAIN
or with
BRIDLE.

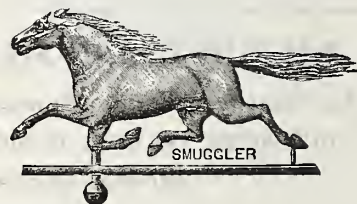
Price,
55c. to \$1.25.



WEATHER VANES.

All our vanes are made of copper and gilded with 23-karat gold-leaf that will remain bright for years. The vanes include iron spire with steel spindle, points of the compass and gilded balls and letters.

Descriptive Circular and Price List on application.



HAY KNIFE.



Price, \$1.25.



WELL BUCKETS.

Made from oak, heavily
hooped.

—ALSO—

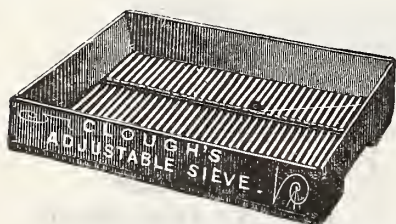
Light and heavy weight
Buckets made from
galvanized iron.

BULL RINGS.

Copper and Steel.



Price, 15c. to 30c.



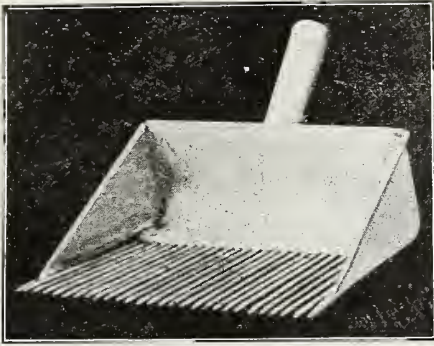
CLOUGH'S ADJUSTABLE SIEVE.

In offering this adjustable sieve to farmers and others, we know that they will find it useful and valuable for separating foul seeds from grain, and sifting out the small grain, thereby getting the most vigorous kernels for seed; also for cleaning and sorting beans, peas, etc.

Price, \$3.00.

Prices subject to change without notice. (See note on inside first cover.)

BLUEBERRY PICKER.



This picker is made from the best quality of heavy tin, and fitted with points made from highest tempered steel spring wire. The points are thoroughly soldered, making a very substantial and convenient picker.

Made in the following sizes:

18 point,	.	.	.	.	.	.	\$1.50
20 "	.	.	.	.	.	.	1.65
24 "	.	.	.	.	.	.	1.90
26 "	.	.	.	.	.	.	2.00
28 "	.	.	.	.	.	.	2.10
30 "	.	.	.	.	.	.	2.25

The following sizes are more heavily constructed, with handle inside, and with higher back.

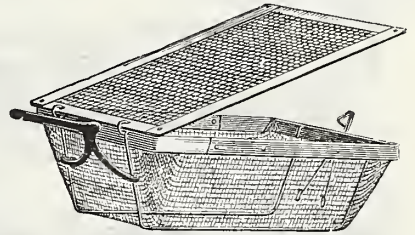
32 point,	} Price on application.
36 "	.	.	.	.	.	.
40 "	.	.	.	.	.	.

CORN POPPERS.

Firm and well braced popper with detachable handle, and with wire guards to protect bottom of popper from wear.

PRICE.

1 quart,	20c.	2 quart,	30c.
1 1-2 quart,	25c.	4 quart,	55c.
8 quart (factory size), \$2.75.			



"K. & W."

WHITE RICE POPPING CORN.

Finest quality, tender and crisp. Pops out snow white. Sold both shelled and on the ear. Special price to users of large quantities.

WOODEN MEASURES.



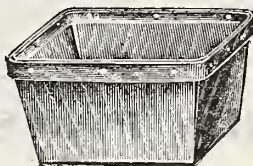
In sets of 1, 2, 4, 8 and 16 quart sizes.

Price per set, \$2.85.

BERRY BASKETS.



Oblong Pint.

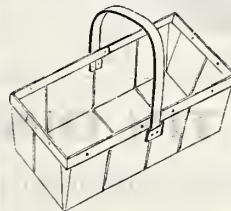


Quart.

Our berry baskets are made of best quality clear wood and put up in good strong crates. Packed 1,000 in a crate.

Write for prices.

VERBENA BASKETS.



With wood or wire handle. 10 inches long; 5 inches wide; 3 inches deep. \$2.25 per hundred; \$18.00 per thousand.

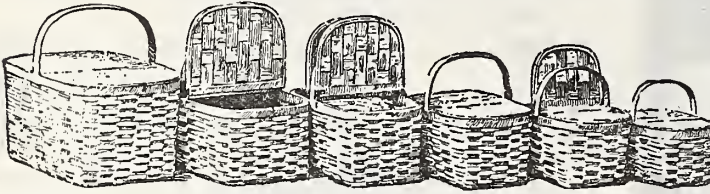
Wood handle. 12 inches long; 7 inches wide; 4 inches deep. \$3.00 per hundred; \$28.00 per thousand.

Special prices quoted for large quantities.

Prices subject to change without notice. (See note on inside first cover.)

BASKETS

OF EVERY SIZE AND STYLE FOR
FACTORY, MILL, STORE AND FARM.
Corn Packers' Baskets a Specialty. Write for Quotations.



Ash-Covered Lunch Baskets.

One or Two Bail, Ash-Covered Lunch Bas ets.

No. 0	\$2.00	No. 4	\$1.00
No. 1	1.75	No. 5 .....	.85
No. 2	1.35	No. 6 .....	.75
No. 3	1.15	No. 7 .....	.70



Hole-Handled Market Baskets.



Bail-Handled Market Baskets.

Solid Oak Market Baskets, with Bail, Hole or Block Handle Strapped.

No. 0	\$1.10	No. 2	\$.70
No. 1 .....	.90	No. 3 .....	.60



Oak Splint Basket.

No. 1, 6 bush., solid oak, nailed rim.	\$7.00
No. 1, 5 " " " " " "	6.00
No. 1, 4 " " " " " "	5.00
No. 1, 3 " " " " " "	3.75
No. 1, 2 " " " " " "	1.90
No. 1, 1 " " " " " "	1.35
No. 0, 1 " " " " " "	.90



1-2 bush. Basket.



1-4 bush. Basket.

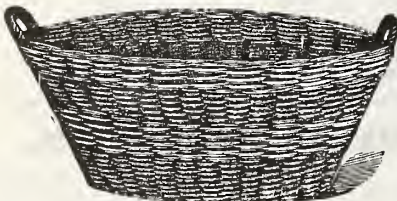
1/2 bush., solid oak, nailed rim, stiff bail	75c.
1/2 " " " " " " drop	60c.
1/2 " " " " " " " "	70c.
1/2 " " " " " " " "	55c.



THE HOLDEN ASH STAVE BASKETS.

One of the smoothest, strongest and best baskets for farmers and grocers. Made in every size from 1/4 bushel to 4 bushels.

Write for quotations.



Oval Willow Clothes Baskets.

OVAL WILLOW CLOTHES BASKETS.

Small	\$1.75
Medium	2.00
Large	2.35

OBLONG ASH CLOTHES BASKETS.

Small	\$1.50
Medium	1.85
Large	2.25



Barrel Baskets.
55 cents.

ROUND TIN DINNER PAILS.

Made from good quality polished tin, complete with pie tray and cup, with seamless outside cover.

Price, \$1.25 and \$1.35.

Prices subject to change without notice. (See note on inside first cover.)



HIGH GRADE SCREEN DOORS AND WINDOW SCREENS.

OUR SCREEN DOORS are square mortised and tenoned joints throughout, making the strongest and best construction possible.

The wire cloth is placed on the screen door by special machinery, which stretches the cloth drumhead tight. The wire cloth is pressed into a groove in the wood and covered with a flush beaded moulding mitered at corners, which prevents the cloth from becoming loose and baggy.

Adjustable Window Screens. The "Hummer"

guaranteed to have perfect adjustment. Wire cloth is securely fastened to frame, and covered with moulding. Material used is best hard wood, finished in oil, both sides alike.

The "Sherwood" Screen

is an all-metal frame made of pressed steel. The wire cloth is drawn tightly and locked securely in the frame. Operates easily in all kinds of weather.

Continental Sanitary Window Ventilators

Fresh Air
Without
Drafts, Dust,
Rain or Snow



For Bed Rooms,
Living Rooms,
Bath Rooms,
School Rooms,
Hospitals,
Offices, Etc.

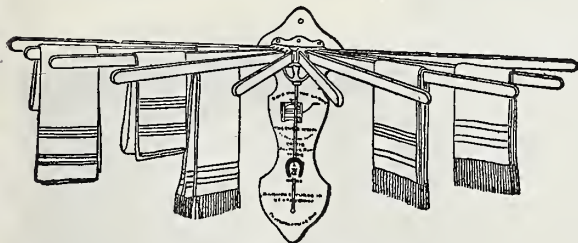
A specially treated cotton fabric of fine mesh keeps out all drafts, dust, rain and snow, but permits a constant circulation of fresh air. The frame is of hard wood, adjustable to fit any ordinary window opening.

No. 93. 9 inches high, adjustable 23 to 37 inches wide.

No. 183. 18 inches high, adjustable 23 to 37 inches wide.

Write for quotations.

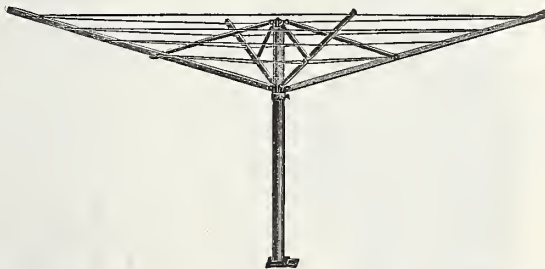
Empire Folding Wall Dryers.



Price, \$1.50.

Advance Clothes Dryers.

The Best Clothes Dryers in Use.



No. 1 120 ft. line, \$6.00.

No. 2. 160 ft. line, \$6.25.

Balcony Dryers, - \$10.50

Prices subject to change without notice. (See note on inside first cover.)



"K. & W." Sanitary Sweeping Compound.

Can be used on carpets, rugs, linoleums, matings, tile and wood floors; is economical, non-inflammable, and *absorbs* the dust, thereby preventing the scattering of disease germs.

This powder is mixed by machinery only, and is composed of a special wood pulp combined with absorber and silica, which gives it its cleansing property. There is *no sand* used, the grit which is noticeable being silica. The oil of cedar, which is used as a disinfectant, is one of the best known to medical science. This powder always runs uniform, will cover a large area, and its use is recommended in every home, public building, store and factory.

PRICE.

1-4 barrel (37 1-2 lbs. net),	.	.	.	.	.	.	.	.	.	\$1.40
1-2 barrel (75 lbs. net),	.	.	.	.	.	.	.	.	.	2.00
Barrel (150 lbs. net),	.	.	.	.	.	.	.	.	.	3.50

Special quotations on large quantities.

O'CEDAR POLISH AND DUSTLESS MOP.

The one **perfect polish** for pianos, automobiles, furniture, hardwood floors, and all waxed, varnished and polished surfaces, as it **will not gum**, and aside from its high lustre, it is a dust allayer, a labor saver, and clean and sanitary in every particular.

Price O'Cedar,	4 oz. bottle,	.	.	.	.	.	.	.	.	.	\$ .25
	12 " "	.	.	.	.	.	.	.	.	.	.50
	Quart can,	.	.	.	.	.	.	.	.	.	1.00
	Half gallon can,	.	.	.	.	.	.	.	.	.	1.75
	One " "	.	.	.	.	.	.	.	.	.	3.00

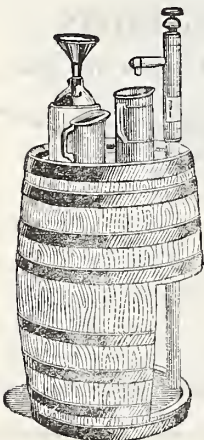
Price O'Cedar Mops, No. 3 (triangular), \$1.50; No. 4 (triangular), \$1.00.



BROOMS, BRUSHES AND DUSTERS, AND A LARGE VARIETY OF WOODEN WARE OF ALL KINDS.

20th CENTURY BARREL PUMP.

FOR VINEGAR.



Made from chemicalized wood and is strictly non-corrodible; does away with the slow, leaky faucet; will pump the liquid at the slightest stroke of the piston.

Price, \$1.15

STONE WARE.

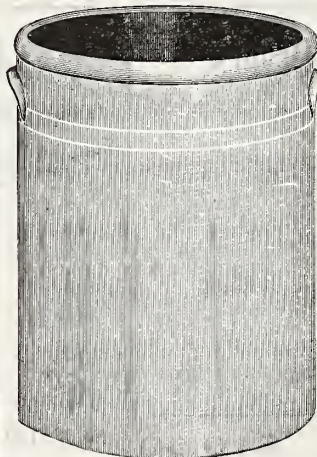
ALL SIZES OF

**Stone Pork Barrels, Butter Pots,
Bean Pots, Preserve Jars,
Jugs and Churns.**

Write for Price List.



Bean Pot.

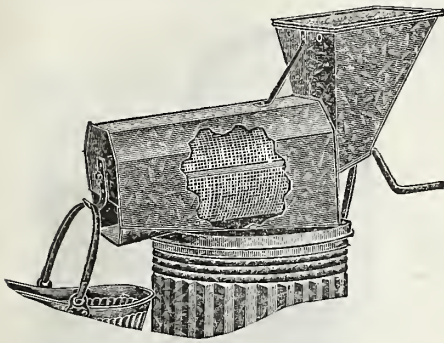


Pork Barrel.



Butter Pot.

Prices subject to change without notice. (See note on inside first cover.)



THE NATIONAL.

THE NATIONAL ROTARY ASH SIFTER.

In galvanized iron case. No dust. Works easily, quickly and well.

Will fit 18-inch iron can or flour barrel.

Price, \$4.75.

THE FAVORITE ASH SIFTER.

Wooden rim, with heavy wire bottom.

Price, 70c.

THE "LOWELL" ASH SIFTER.

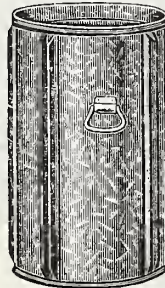
This is an **all wire** sifter, sifting the ashes through the sides as well as the bottom.

Price, 75c.

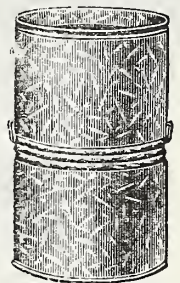
GALVANIZED IRON ASH BARRELS.

Solid, heavy barrels. No danger from hot ashes.

Price, No. 041,	.	.	.	.	.	\$5.50
" " 5,	.	.	.	.	.	6.50
" " 190,	.	.	.	.	.	8.50
" " 0190,	.	.	.	.	.	6.50



No. 190.



No. 5.



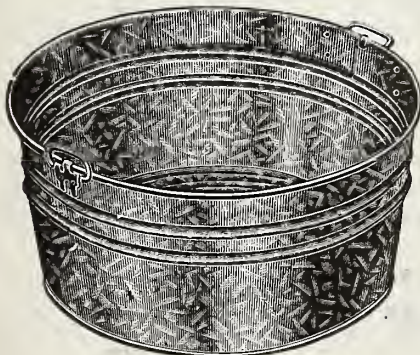
GALVANIZED IRON PAILS.

10 quart,	\$.60
12 "	.65
14 "	.70
16 "	.85
10 " extra heavy,	1.00
12 " " "	1.10
14 " " "	1.15
16 " " "	1.35

GARBAGE PAILS.

Made from
Galvanized Iron.

No. 000,	\$1.40
" 02,	2.10
" 03,	2.40
" 04,	3.00
" 40,	3.75
" 50,	4.50
" 310,	5.50



Galvanized IRON TUBS.

With wringer
attachment.

No. 11,	\$1.85
" 22,	2.15
" 33,	2.25
A Keelers,	1.00
B " "	1.10
O " "	1.35

Galvanized Iron Coal Hods.

No. 515,	\$.85
" 516,	.90
" 517,	1.00
" 518,	1.10
" 156, heavy,	1.25
" 166, " "	1.40
" 176, " "	1.50
" 186, " "	1.70



Prices subject to change without notice. (See note on inside first cover.)

MAJESTIC ROTARY WASHER.

The rotary is simple, strong, easy running and noiseless, the rotary motion being continuous, and the fly wheel heavy. Very little power is required to operate the machine. It is constructed of the best white cedar, and is strong and finely made.

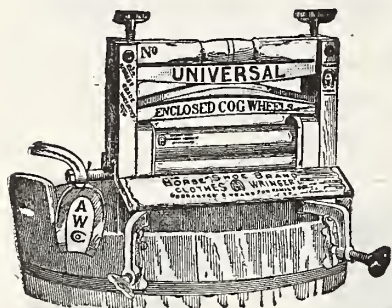
Price, \$11.00.

RICHMOND "HIGH-SPEED" WASHER.

Similar in construction to the Rotary, but is equipped to run very rapidly, smoothly and easily.

Price, \$15.00.

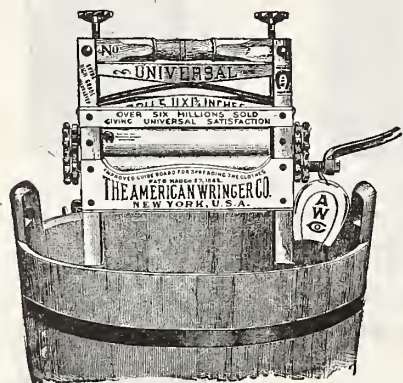
CLOTHES WRINGERS.



UNIVERSAL

BEST KNOWN AND LARGEST
SELLER.

Made either with regular
bearings, ball bearings, or
with enclosed gears.



TUB WRINGERS.

Universal,

Household,

Eureka,

Daisy.

BENCH WRINGERS.

Universal,

Household.

Write for prices.



WHITE'S

Patent Mop Wringers.

Will quickly wring a mop perfectly dry,
without touching mop with hands.

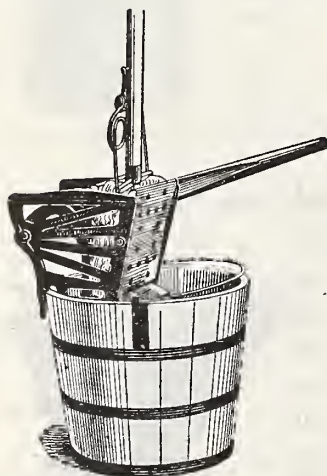
The wringer may be instantly attached to the pail and quickly removed.

Always place the wringer on the opposite side of pail from the bail.

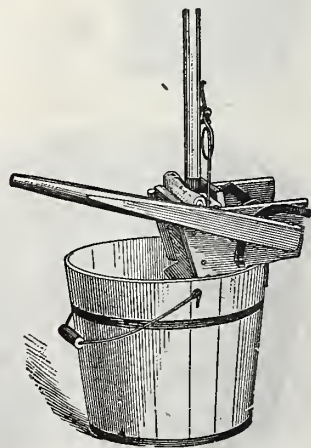
Use mop made of any material desired. A short, thick mop is generally best liked, and is the best wrung by the wringer.

Price, Family Size, \$1.50

" Hotel " 2.25

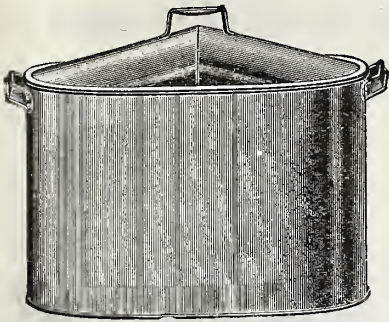


Hotel Size.



Family Size.

Prices subject to change without notice. (See note on inside first cover.)



WASH BOILERS.

8 in. X, tin bottom,	\$2.25	9 in. X, copper bottom,	3.25
9 in. X, " "	2.50	8 in. Rome, all copper,	4.75
8 in. X, copper bottom,	3.00	9 in. Rome, " "	5.25

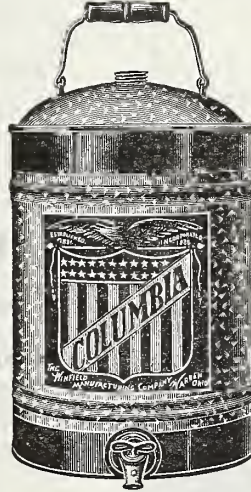
TEA KETTLES.

NICKLE
COPPER.

PRICE,
\$2.00.



OIL CANS.



5 Gal. Columbia Oil Can.

Price, \$1.75.



1 Gal. Polo Oil Can.

Price, 50c.

LARGE ASSORTMENT OF METAL AND GLASS OIL CANS,

holding from one to ten gallons each.

"K. & W." OIL TANKS.

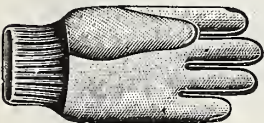
For use where a considerable quantity of oil is kept. These tanks are fitted with a pump, and are safe, convenient and durable.

Price, 60-gallon tank,	.	.	.	\$ 9.50
" 110-gallon tank,	.	.	.	17.00



BOSS COTTON GLOVES.

Price.

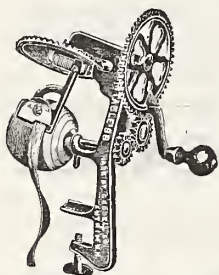


Full size; well made.
Good gloves for all kinds
of work, at a low price.

No. 14BD	25c. per pair
No. 70K	15c. " "
No. 31K.	25c. " "
Jersey, No. 1.	25c. " "
Jersey, No. 3	25c. " "
No. 179 LP Gauntlet.....	50c. " "
Mittens, No. 320.	25c. " "
Mittens, No. 280.	50c. " "

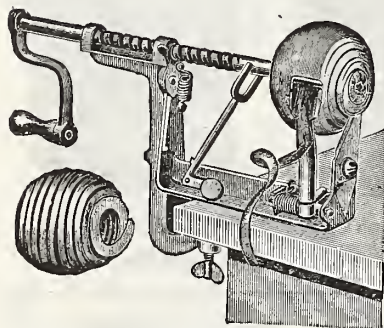
Prices subject to change without notice. (See note on inside first cover).

APPLE PARERS.



NO. '98. TURN TABLE.

Price, \$1.00.



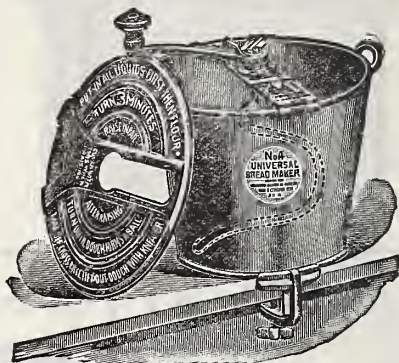
GENUINE WHITE MOUNTAIN
PARER, CORER AND SLICER.

Price, 75 cents.

THE UNIVERSAL THREE-MINUTE BREAD MAKER.

Bread Maker, Mixer, Kneader and Raiser all Combined.

Made of heavy tin and sheetsteel. All parts tinned. No housekeeper who has once used it will ever be content to go back to the old, laborious, disagreeable way of making bread by hand. Very simple in construction. A child can operate it. As easily cleaned as a tin pail.



PRICE.

No. 2,	.	.	\$2.50
No. 4,	.	.	3.50
No. 8,	.	.	4.00
No. 44,	.	.	3.00

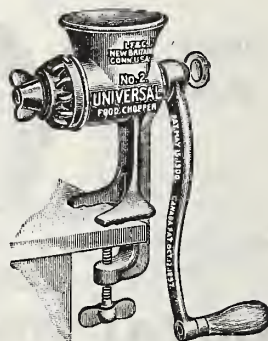
The Universal Food Chopper.

All Parts Tinned and Interchangeable.

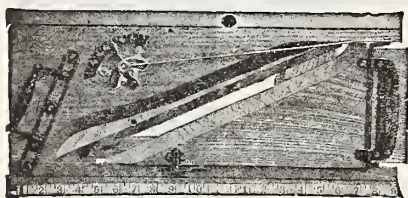
Chops rapidly and without mashing, and in pieces as fine or coarse as wanted, all kinds of meat, fish, fruits, eggs, bread and vegetables.

PRICE.

No. 0,	.	.	.	\$1.65
No. 1,	.	.	.	2.00
No. 2,	.	.	.	2.50
No. 3,	.	.	.	3.25



No. 2. Medium Family Size.



COMBINATION SLICER.

For slicing bread, dried beef, pressed meats, cabbage, pineapple, etc.

Instantly changed from a thick slice to the thinnest.

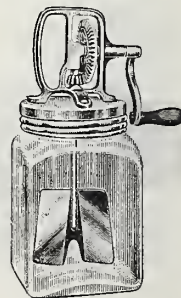
Price, \$3.25.

Lightning Butter Making Machine.

Designed especially for the purpose of merging milk and butter, making about two pounds of table butter from one pound of butter and one pint of milk. This is accomplished easily and quickly by the peculiarly shaped metal dasher. The propeller-like motion creates a tremendous agitation, mixing the butter and milk thoroughly in about one minute. Being made entirely of metal and glass this machine is easily and thoroughly cleaned, making it perfectly sanitary in every respect.

PRICE.

No. 1	(to make 1 pound of butter),	.	.	.	.	.	\$1.75
No. 2	" 2 "	.	.	.	.	.	2.25
No. 3	" 4 "	.	.	.	.	.	2.75
No. 4	" 6 "	.	.	.	.	.	3.25

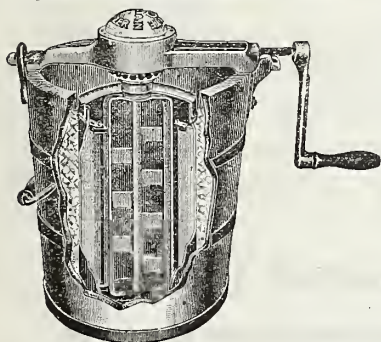


Prices subject to change without notice. (See note on inside first cover.)

—ICE CREAM FREEZERS.—

“WHITE MOUNTAIN.”

Perfected by the introduction of an important feature of a double self-adjusting wood scraping bar attached to the duplex dasher. By means of this device the actual time of freezing cream has been very materially reduced.



The cut shows the construction and position of the mechanism of the White Mountain Freezer. The can moves from right to left, the outside beater moves from left to right, scrapes with its wooden bars the frozen cream from the can and throws it toward the center, where it is met by the floats of the inside beater moving in an opposite direction and returned to the inside surface of the can to be refrozen. The triple motion thus induced keeps the cream constantly moving and insures every particle being smoothly and evenly frozen.

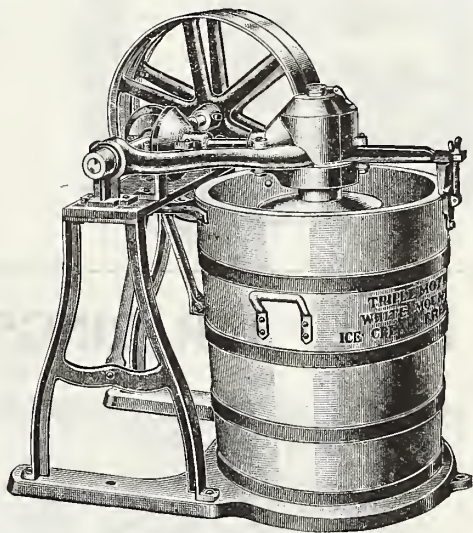
PRICES.

Junior,	\$1.50	4 quart,	\$5.00	12 quart,	\$13.50
1 quart,	3.00	6 “	6.50	15 “	16.00
2 “	3.75	8 “	8.50	20 “	20.25
3 “	4.50	10 “	10.50	25 “	24.50

“WHITE MOUNTAIN” POWER FREEZERS.

Size 15, 20, 25 and 40 quarts.

The platform and stand are cast iron, nicely galvanized to prevent rust. When in use, the gear frame is fastened by latch bolt and thumb screw; when released it can be swung to either side, so tub and can may be removed. Equipped with either pulley or fly-wheel, and a good power machine produced. The pulley is $15\frac{3}{4} \times 4\frac{1}{4}$, and the freezer should be operated at a speed of seventy-five revolutions per minute.



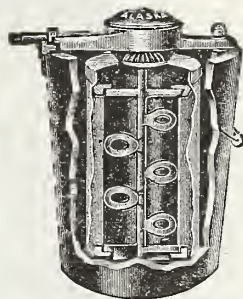
Prices
on
application.



“ALASKA.”

The only freezer having the Perpetual Motion Aerating Spoon Dasher, with its spoon-shaped floats, open in the center like mixing spoons, which aerates, stirs and beats the mixture rapidly and thoroughly.

The cut also shows the new device attached to the under part of the gear-frame or cross-bar, which effectually protects the gearing and can cover from salt and ice.



PRICES.

1 quart,	\$2.30	6 quart,	\$5.15	12 quart,	\$10.75
2 “	2.80	8 “	6.50	15 “	12.50
3 “	3.25	10 “	8.00	20 “	17.00
4 “	4.00				

FREEZER CLAMP OR HOLDER.

A perfect device for holding the freezer firm and steady. Easily adjusted to the tub by means of thumb nuts. Price, 2 to 10 quarts, 35 cents; 12 to 25 quarts, 55 cents.

An Illustrated Catalog of Power and Fly Wheel Freezers, Repairs, and Tubs and Cans for Packing Purposes furnished on application.

Prices subject to change without notice. (See note on inside first cover.)



THE "PILGRIM" Refrigerators and Ice Chests.

Thoroughly constructed from hard wood, and beautifully finished. Cleanable and perfectly sanitary. The economy of ice is a very important consideration, and the consumption of ice will be much smaller in our refrigerators than in many others, and at the same time insure a low and even temperature and perfect circulation of cold, dry air.

GROCERS' REFRIGERATORS A SPECIALTY.

Send for Illustrated Catalog and Price List.

FRUIT JAR RINGS.



"K. & W." White Lightning, "K. & W." Red Combination (Wide Mouth and Mason), "Kold Pac," Gray (Wide Mouth). Manufactured from highest grade rubber, and attractively packed in handsome colored containers.

1 dozen in each package.

FRUIT JARS.

GENUINE "LIGHTNING."

11 ounce, pint, 1 quart and
58 ounce sizes.

EASY-SEAL ("E-Z").

1-2 pint, pint, 1 quart and
2 quart sizes.

Write for quotations.



All Genuine "Lightning" Fruit-Jars Bear Trade-Mark "Lightning"

JELLY TUMBLERS.



**BEST
QUALITY
CLEAR
GLASS.**

1-3 pint, packed 27 dozen to the barrel.

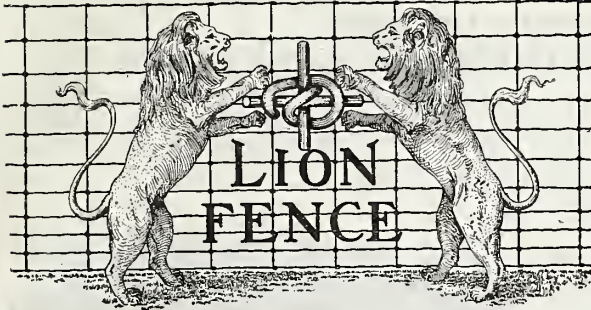
1-2 pint, packed 20 dozen to the barrel.

Prices subject to change without notice. (See note on inside first cover.)

Fences — PAGE-LION — Fences.

MADE BY

The OLDEST and BEST KNOWN FENCE COMPANY in the WORLD.



A full Line LION-FENCE. All Heights.

Fences for Every Purpose, to Suit Every Condition.

Large, Heavily Galvanized Wires, Made from Open Hearth Steel.

Straight, Continuous Cross Wires. No Wraps or Welds.

THE BEST FENCE FOR THE MONEY.

Best for Horses.

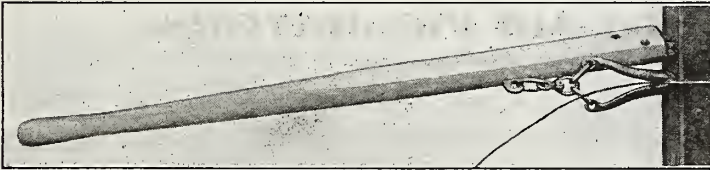
Best for Cattle.

Best for Sheep and Hogs.

Best for Poultry.

POULTRY	P 1848-32	18 bars, 48 inches, 32 stays per rod. Spaced, 1 1/2 1 1/2 1 1/2 2 2 2 2 2 2 2 2 3 3 3 4 4 4 5 5 inches.
	P 2058-32	20 bars, 58 inches, 32 stays per rod. Spaced, 1 1/2 1 1/2 1 1/2 1 1/2 2 2 2 2 2 2 2 2 3 3 3 4 4 4 5 5 5 5 inches.
HOG	O 726-16	7 bars, 26 inches, 16 and 32 stays per rod.
	O 726-32	Spaced 3 3 3 3 4 5 6 inches.
	O 832-16	8 bars, 32 inches 16 and 32 stays per rod.
	O 832-32	Spaced, 3 3 3 3 4 5 6 6 1/2 inches.
CATTLE	O 635-16	6 bars, 35 inches, 16 stays per rod. Spaced, 6 6 7 8 8 inches.
	O 845-16	8 bars, 44 inches, 16 stays per rod. Spaced, 4 5 6 6 7 8 8 inches.
	O 952-16	9 bars, 52 inches, 16 stays per rod. Spaced, 4 5 6 6 7 8 8 8 inches.
	O 1155-16	11 bars, 55 inches, 16 stays per rod. Spaced, 3 3 3 3 4 5 5 6 6 7 8 8 inches.

Write for quotations.



THE TOWNSEND WIRE STRETCHER.

The Townsend Wire Stretcher is made with a wooden lever or handle three feet in length, to which is attached malleable iron pinchers, into which are riveted corrugated steel grips; warranted not to slip. It is a substantial and very durable implement.

Price, 75 cents.

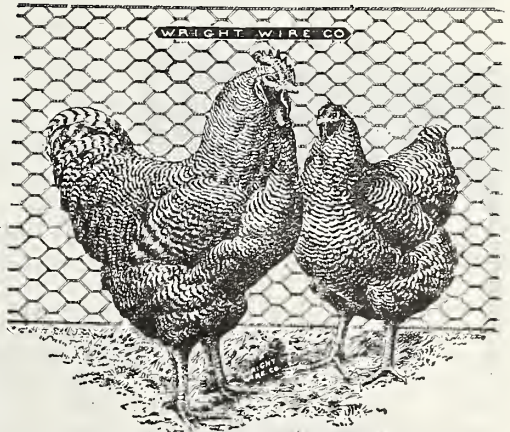
GALVANIZED POULTRY NETTING.

Made from No. 20 selected steel wire, galvanized *after* weaving. Made in 2-inch and 1-inch mesh, and of a superior, smooth finish.

EXCELSIOR POULTRY FENCE and RABBIT

Graduated Meshes.

All wires are No. 19 gauge hard drawn tough steel, standing the highest breaking strain used in any fencing. The selvages consist of double No. 19 wires.



Prices on application.

Prices subject to change without notice. (See note on inside first cover.)

WE ARE AUTHORIZED AGENTS FOR CYPHERS COMPANY INCUBATORS, HOVERS AND BROODERS.

Incubators Made in Three Styles—Eight Different Sizes.

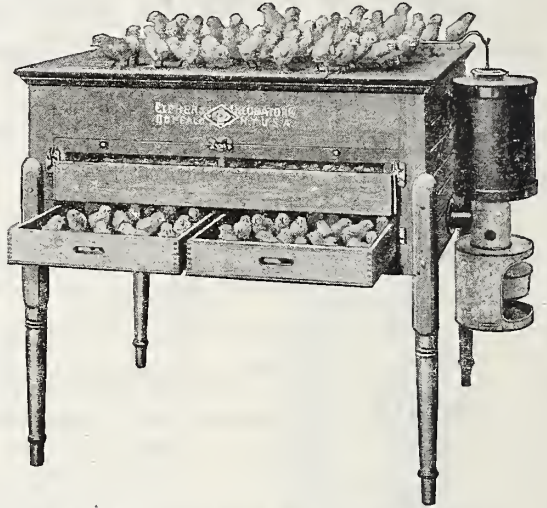
FOR THE SEASON OF 1919.

“STANDARD” CYPHERS INCUBATORS.

The **CYPHERS INCUBATOR** is known as the “business incubator of the age.” It has **won its way** in all parts of the world because it gives the **best results**. It is used on more Government Agricultural Experiment Stations, on more large practical poultry plants, on more successful egg farms, and by more prominent poultry fanciers than all other makes combined. It hatches a **larger percentage** of the eggs entrusted to it, and produces **larger, stronger, healthier** and more **vigorous** chicks and ducklings than any other incubator ever built. This is the Cyphers guaranty.

CYPHERS INCUBATORS are built to hatch **and to last**. With proper care—the same care you would give a valuable piece of household furniture—a Standard Cyphers will last an ordinary lifetime. They are guaranteed by us to last **ten years** without repairs. We make this guarantee because they **have lasted** much longer than this—and are still doing first-class work.

These are machines that **for twenty years** have been recognized as the “standard hatchers of the world.” Tens upon tens of thousands of them have been sold and are in **successful use in every civilized country on the globe**. They are the last word to date in incubator building, not a penny being spared anywhere in their construction to make sure of their doing satisfactory work in **all climes**, under **widely different conditions**, in the hands of all sorts of people. Are built in four popular sizes and at prices as follows: 70 eggs, price complete, \$18.00; 140 eggs, price complete, \$28.50; 244 eggs, price complete, \$41.00; 390 eggs, price complete, \$48.00.



Standard Cyphers Incubator. Made in four sizes.
Illustration shows No. 3 Incubator, having 390 egg capacity.

COLUMBIA HOT-AIR INCUBATORS.

Are built to meet the widespread demand for large capacity lamp-heated machines that can be sold at **surprisingly low prices** and yet be guaranteed to do high-class work.

The incubator case is of wood **attractively** finished in Flemish green with brass trimmings. Walls are **double** with air space insulation.

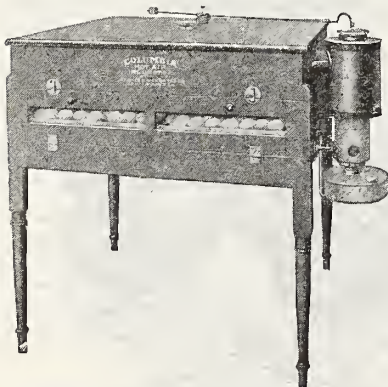
Heater is fume proof, forced draft, asbestos covered and metal banded. Lamp bowl has **seamless bottom**. Burner is best on market for incubator use and chimney is of metal. Lamp support is readily adjustable.

COLUMBIA INCUBATORS embody the Cyphers Company patented **diffusive principle** of heat mixture and uniform circulation and are **self-ventilating**.

Both sizes of **COLUMBIAS** are equipped with regular Cyphers zinc-and-steel, toggle-joint standard regulating device, the **same exactly** as has been used on Cyphers Incubators for years with world-wide success.

Ample room exists under each egg tray as a **nursery space** for the chicks first to hatch.

COLUMBIA INCUBATORS are both self-ventilating and self-regulating, and when operated under normal atmospheric conditions **do not require supplied moisture**. Are made in two sizes: 140 eggs, price complete, \$25.00; 250 eggs, price complete, \$28.00. **Fully guaranteed**.



Large size Columbia Hot-Air Incubator.
Capacity, 250 eggs.



Small size Columbia Incubator.
Capacity, 140 eggs.

Prices subject to change without notice. (See note on inside first cover.)

SUPERIOR HOT-WATER INCUBATORS.

These machines are exactly what the name says. They are an exceptional value for the price, and the person who wants a hot-water incubator cannot do better than purchase one or more of these machines.

The incubator case is of wood, attractively finished in **golden brown**, with brass trimmings. Walls are **double** with air-space insulation.

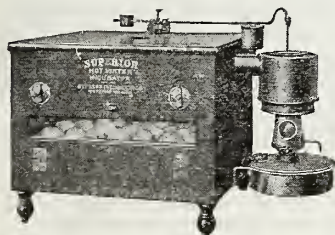
The boiler is of heavy-weight **polished copper** and so is the **tubular tank**, in which there is a **forced circulation** of water—a decidedly **valuable feature** that is not secured, as a rule, in hot-water incubators.

Lamp has **seamless bottom bowl**. Burner is best on market for incubator use and chimney is of metal, constructed **without solder**.

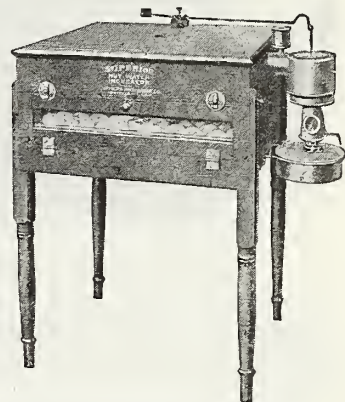
Both sizes of **SUPERIORS** are equipped with the regular Cyphers zinc-and-steel, toggle-joint **standard** regulating device, the **same exactly** as has been used on Cyphers Incubators for years.

There is ample **nursery space** for the chicks first to hatch, furnishing a comfortable "drying off" and hardening place for the early comers.

SUPERIOR INCUBATORS are both self-regulating and self-ventilating, and when operated under normal atmospheric conditions **do not require supplied moisture**. Are built in two sizes: 65 eggs, price complete, \$13.00; 130 eggs, price complete, \$20.00. **Fully guaranteed.**



Small size Superior Incubator.
Capacity, 65 eggs.



Large size Superior Incubator.
Capacity, 130 eggs.

SIMPLICITY (Patented) INCUBATORS *"Have-No-Cold-Corners"*

The **Simplicity** is so easy to operate that failures are rare. Many users report 100 per cent. hatches—and 80 per cent. to 90 per cent. hatches are common. It's the 20th century type of incubator—all metal, sanitary, fireproof. The sturdiest and most compact incubator in the world.

METAL EXTERIOR: Heavy sheet steel scald like a dishpan; positively sanitary.

TOP IS REMOVABLE: Easily lifted off to turn eggs or renovate incubator.

FLUELESS BURNER: Better, cleaner, hotter flame. No odor. Metal flame shield furnished.

LAMP OIL FOUNT: Extra large; extra heavy; extra safe; can't leak.

CROSS HOT WATER PIPE: Equalizes heat by increasing water circulation.

HEAT REGULATOR: Double disc thermostat. Most sensitive and accurate device known to science.

FELT LINING: Lays between radiator and exterior. Keeps outside cool and keeps heat inside.

METAL AND FELT EGG SHIELD: Stands between eggs and radiator—protects eggs from direct heat.

HEAT REGULATOR ARM: Note how simple, how few parts. Means no trouble; no breakages.

CIRCULAR RADIATOR: Heavy 14-ounce cold-rolled copper. Triple excess heating capacity.

VENTILATING CURTAINS: Act as air filter—prevent too rapid change of air.

EGGS LAY ON STEEL SCREEN: Permits complete air circulation around eggs, and light to reach brooder compartment.

THERMOMETER: Accurate to highest degree, no deviation from closest accuracy.

GLASS IN TOP: Thermometer and eggs in plain sight (without opening incubator).

EXIT FOR CHICKS: Compartment below egg chamber makes fine brooder for small chicks.

PRICES.

50-Egg Simplicity, \$12.00

100-Egg Simplicity, \$18.00

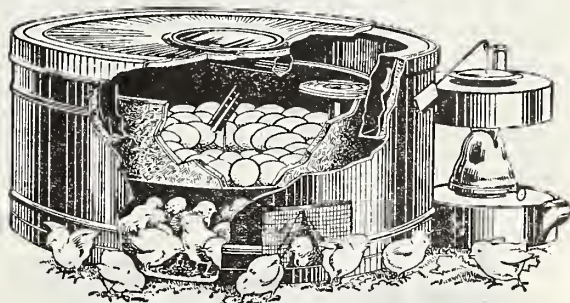
150-Egg Simplicity, \$21.00

Write for special catalog.

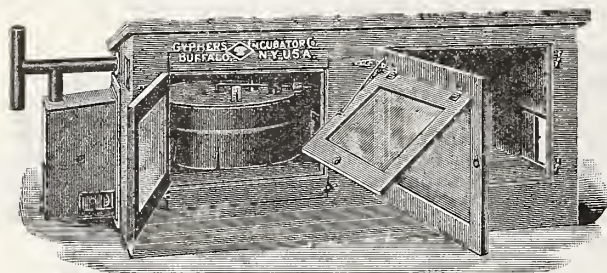
Prices subject to change without notice. (See note on inside first cover.)

A ROUND INCUBATOR.

Its patented circular, hot-water, copper radiator, with 602 square inches of heating surface, entirely surrounds egg chamber. Heats from all angles towards center, and as all eggs are on one level, each and every egg receives uniform and accurate heat. This means each egg has an equal chance to hatch, assuring big hatches of healthy, strong chicks.



CYPHERS COMPANY BROODERS and HOVERS.



CYPHERS STYLE C OUTDOOR BROODER.

Fireproofed, Insurable, Self-Ventilating and Self-Regulating.

Same in all respects as the popular Style B Brooder, except that hover apartment has double walls with air-tight space between, and window to hover apartment has double glass with air space between. Is especially recommended for extra cold climates, and in the early brooding season.

THIS DOUBLE USE of the Cyphers Brooder means a considerable saving of money. It makes a safe and comfortable enclosure for the young chicks at night, and saves the buying of a coop for them. These outdoor brooders, on account of their fireproof construction, can be used indoors, although we supply a special brooder, Style D, for indoor purposes. All Cyphers 1919 Brooders, both outdoor and indoor, contain either two or three apartments. The popular Style C (shown in illustration herewith) contains three apartments; first, roomy space under the hover; second, hover chamber; third, well-lighted, exercising apartment. It has often been said by users of Cyphers Brooders that **"They mother the chicks better than a hen."**

CYPHERS ADAPTABLE HOVER.

The Cyphers Adaptable Hover is self-ventilating and self-regulating. It furnishes a continuous supply of **fresh, pure-warmed** air under the hover, and at the same time maintains a steady, uniform heat. All the essentials of successful brooding of chicks are automatically provided. Thousands of poultry growers use this hover in raising big, strong flocks of chicks. It is "adaptable" to use in colony coops, in portable houses, in home-made brooder coops, such as goods boxes, piano boxes and organ cases, as well as in large brooding houses. It is constructed entirely of non-combustible material, and bears the fire underwriters Inspected Brooder label. Capacity, seventy-five newly hatched chicks, or fifty chicks that are ten days to six weeks old.



CYPHERS PORTABLE HOVER.

CYPHERS PORTABLE HOVER.

The Cyphers Portable Hover is the only **self-regulating and self-ventilating** "Portable" brooding hover thus far invented, and we guarantee it to be the best brooding device of the kind on the market. As it is equipped with the same high-grade thermostat as the Cyphers Incubators and the Cyphers Adaptable Hover, it maintains a **steady and uniform heat**. It is positively and infallibly automatic in ventilation, preventing the trapping of "dead" air or poisonous gases underneath the curtain. A continuous supply of fresh, warmed air is automatically forced beneath the hover.

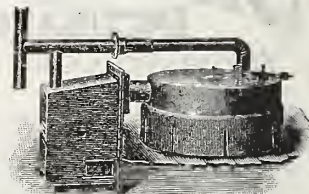
This Portable Hover, as its name indicates, can be picked up at any time, all complete, and moved about without hindering its operation. Very convenient for cleaning and moving. Rated capacity, seventy-five newly hatched chicks, or fifty chicks that are ten days to six weeks old.

"STANDARD" CYPHERS BROODERS.

The "Standard" Brooders are not only fireproofed and insurable, but are the most durable, convenient and most efficient indoor and outdoor brooders thus far invented and placed on the market. They are equipped with the same type of high-grade thermostat as used on the "Standard" Cyphers Incubator—you can therefore depend upon an even, steady temperature in the hover, and a lively, thrifty, growing lot of chicks.

These Cyphers 1919 Brooders, all sizes and styles, are self-regulating and self-ventilating.

The outdoor styles are usable also as colony coops for the growing chicks. They are easily and quickly converted into colony roosting coops by simply taking out the hover, which is made removable for that purpose.



ALL METAL ADAPTABLE HOVER.

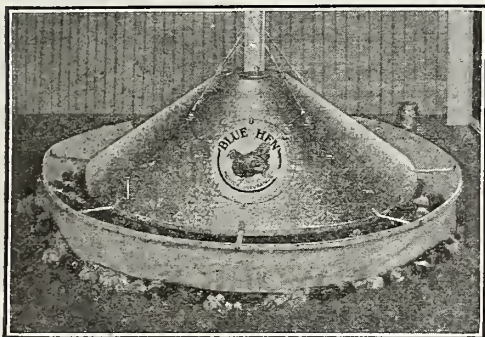
(Self-regulating and bears insurance label as separate device.)

SIZES AND PRICES OF CYPHERS HOVERS AND BROODERS.

Hovers, either Adaptable or Portable, capacity 75 chicks,	-	-	-	\$12.50
Style A, Two Apartment Outdoor Brooder, capacity 75 Chicks,	-	-	-	20.00
Style B, Three Apartment Outdoor Brooder, capacity 100 chicks,	-	-	-	29.50
Style C, Three Apartment Outdoor Brooder, for cold climate, capacity 100 chicks,				31.50
Style D, Two Apartment Indoor Brooder, capacity 75 chicks,	-	-	-	19.00

Prices subject to change without notice. (See note on inside first cover.)

THE EASY, ECONOMICAL WAY TO BROOD FLOCKS OF 100 UP TO 1,000 CHICKS.



Snug and Warm under The Blue Hen.

With a **BLUE HEN COLONY BROODER**

you can raise flocks of from 100 to 1,000 chicks, with very little work and only a few minutes' attention each day—to shake down the ashes and put on fresh coal morning and night.

Heater Is Self-regulating. The heat is kept at the proper point without attention on your part. Fire can't burn up too high nor down too low. Coal feeds on to fire as fast as needed. Burns hard or soft coal at fuel cost of about five cents per day. Plenty of heat for coldest weather.

BLUE HEN COLONY BROODERS.

One of the Most Widely Advertised and best known articles of poultry raising equipment on the market. Designed by practical poultrymen. Does work best for chicks; easiest for user.

Warms Floor without Overheating. Gives proper amount of heat as well as required amount of fresh air **at the same time.** Chicks can't thrive without fresh air. They get it—**and without floor draft**—with a Blue Hen.

Exclusive Curtain Attachment. One of the finest features of The Blue Hen. Prevents floor draft, yet provides plenty of fresh air. Compare this with curtainless brooders which make chicks huddle around heater.

Other Brooders either overheat the brooder house in getting the floor warm enough, or they confine the heat with a curtain fastened tight to hover edge, cutting off the fresh air supply altogether.

Easy to Operate. Anybody who can run an ordinary coal stove can operate a Blue Hen Colony Brooder. In twenty minutes it can be set up complete ready to start the fire. Complete illustrated instructions for setting up and operating are furnished with each brooder.

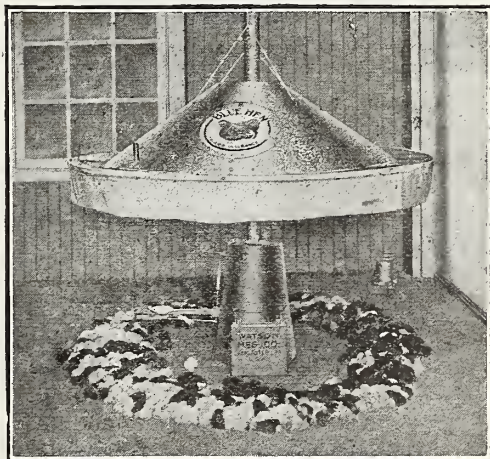
TWO SIZES:

No. 44,	500 chick size,	\$23.50
No. 45,	1,000 chick size,	27.00

Powerful Cast Iron Heater. Made entirely of cast iron. Base is one piece, firepot and top all one piece—no joints to leak gas or ashes. Built for long service.

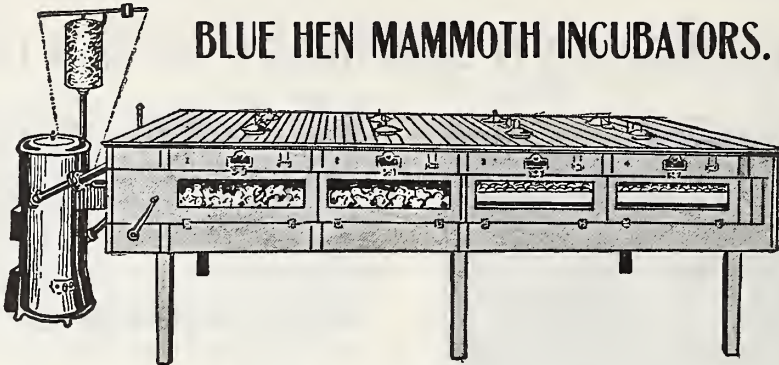
Holds Heat Down around Chicks. The hover, made of heavy galvanized iron, deflects the heat and holds it down around the chicks. Large circular door in hover for convenience in tending fire. Hover easily raised for cleaning underneath.

Like a Mother Hen. The Blue Hen Brooder sends the chicks out for exercise outside the hover, calls them back when they feel the need for more heat, warms and snuggles them while they sleep.



A Contented Blue Hen Family of 925 Chicks.

Prices subject to change without notice. (See note on inside first cover.)



"BIG HATCHES with LITTLE WORK."

That's the Program with a Blue Hen Mammoth.

SOME BIG FEATURES AND ADVANTAGES.

Requires so Little Time to Operate.

Most of the work which requires **hours** with other make mammoth incubators, you can do in a **few minutes** with a Blue Hen.

Automatic Egg Turner turns all the eggs in five to ten **seconds**, and better than you can do it by hand.

Test Eggs in Half Usual Time by holding flashlight under tray supported by sliding device.

Individual Regulator for each hatching compartment regulates fresh air and moisture. In most cases you don't have to cool the eggs.

Nursery under Each Egg Tray. To keep chicks in after they are hatched. Dries and hardens them.

Self-regulating Heater requires only three minutes a day. Coal feeds down on to fire fast as needed.

"Blue Hens are Headquarters for Big Hatches."

SEPARATE BLUE HEN MAMMOTH CATALOG MAILED ON REQUEST.

Blue Hen Lamp Incubators.

"TO HATCH MORE CHICKS." These four words might well be printed in large letters on every part of every Blue Hen Incubator—big hatches, not just this year or next, but year after year, season after season for twenty years or more. There's a Blue Hen to fit every pocketbook—different sizes but the same quality.

"You Take out Chick Insurance when You Put in a Blue Hen."

Built to hold the heat in and keep the cold out. Could be built cheaper, but not better.

Dovetail lock joint construction—same as used on pianos. Boards can't pull apart.

No cold corners. Even temperature in every part of egg chamber. Corners warm as center.

Nursery in which to dry down chicks after hatching before you remove them from incubator.

Refrigerator style overlapping door—double glass. Doesn't stick or lose heat. Always air tight.

Most beautiful finished incubator made. Deep rich mahogany color. Three coats protecting varnish.

Regulates and ventilates itself with almost no attention. Temperature keeps just right.

Heavy double walls. Outer wall one inch thick. Selected lumber. Inner wall wood fibre board.

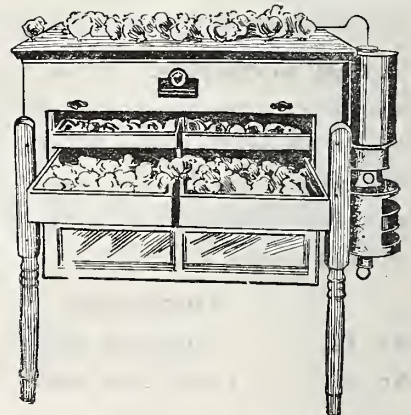
Thick insulation. Important for good hatching. Two inches thick on larger sizes, one inch on smaller.

Powerful heater, carefully insulated, furnishes a constant supply of warm, fresh, moist air.

Fireproof safety lamp case. Allows plenty of fresh air surrounding lamp. Keeps oil always cool.

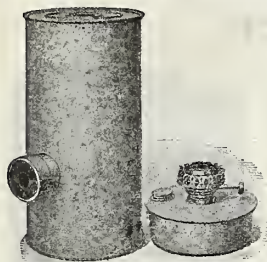
Legs firmly fastened, preventing any vibration or motion. Makes Blue Hen most rigid on the market.

No.	Capacity.	Shipping Weight	Price.
0.	72 hen eggs	90 lbs.	\$19.00
1.	145 hen eggs	110 lbs.	28.00
2.	260 hen eggs	200 lbs.	41.50
3.	400 hen eggs	250 lbs.	48.00



"Get a Blue Hen and Make Sure."

Prices subject to change without notice. (See note on inside first cover.)

**Practical Egg Tester.**

An ordinary glass chimney will fit the burner and is exactly adapted to the purpose.

Price, complete (including box, lamp and reflector), \$1.50.

Practical Egg Tester.

Is 15 inches high, 7½ inches in diameter. Is made of galvanized iron, and is equipped with an extra strong reflector. The lamp is made of the best block tin, the seams being machine turned, and soldered and tested for leaks. The burner is of the latest pattern and construction. No chimney is furnished, because of the liability of breakage in shipping.

X-Ray Egg Tester.

Is made of block tin and consists of a central cylinder or lamp flue 5½ inches high, with an outside diameter of 2½ inches at the base and 2⅝ inches at the top. It is designed for use on an ordinary hand lamp, and fits over any style of burner with a diameter approximating that of the tester.

**X-Ray Egg Tester.**

Price, 25 cents.

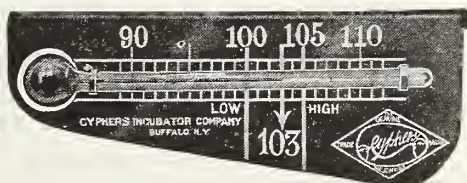
HIGH GRADE TESTED THERMOMETERS.

The price of incubator thermometers does not include the wire hanger. Wire hangers will be supplied at ten cents extra for each thermometer. In ordering wire hangers, be sure to state size of your incubator and year manufactured. If machine has no packer's slip bearing date of manufacture, send description of machine. This is important.

When ordering brooder thermometers, name the style of brooder in which it is intended to be used.



**Cyphers
Brooder Thermometer.**
Price, 50 cents

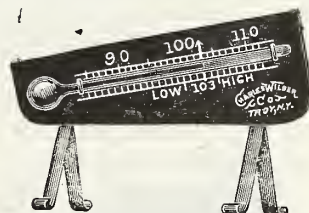


Cyphers Incubator Thermometer.
Price, 60 cents.

WILDER THERMOMETER.

Illustration shows the thermometer with legs unfolded. Easy to see, and may be quickly placed in any part of egg tray. Accurate to the smallest degree.

Price, 65 cents.

**THE "TRIUMPH" CAPONIZING SET.**

There is no doubt as to the advantages of caponizing. The operation is very simple, and with a "Triumph" Caponizing Set it can be performed with safety and thoroughness.

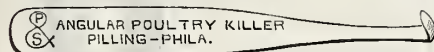
Price, per set, \$3.00.

WILDER MOISTURE GAUGE FOR INCUBATORS.

This instrument is designed to meet the demand of the practical poultryman for a simple, direct reading gauge which will enable him to keep the amount of moisture in his incubator as near as possible to a desired point.

By noting the position of the mercury column, the operator can tell at a glance whether to increase or decrease this amount.

Price, \$1.25.

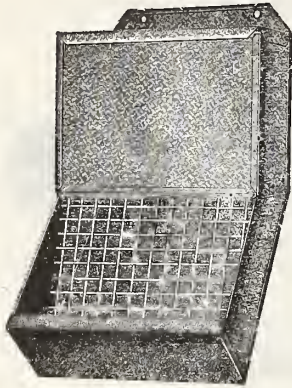
**FRENCH POULTRY KILLING KNIFE.****ANGULAR POULTRY KILLING KNIFE.****POULTRY KILLING KNIVES.**

Every poultry raiser should have one of our killing knives. They are made of finely tempered instrument steel, with nicked handle. Sent, postpaid, on receipt of price.

Angle blade, 65c.; French, straight blade, 65c.

Prices subject to change without notice. (See note on inside first cover.)

SEXTON DRY FEED HOPPER.



OPEN.

This hopper is arranged to hang on the wall the desired distance from floor and never need be removed from the wall to be refilled. It is impossible to waste any feed, as the pan at the bottom takes any feed that may be picked out, and the last crumb can be used, therefore saving any waste. The body being covered keeps feed dustproof and clean, and is always dry.

Body made of galvanized iron and the grating is of round galvanized wire, preventing the poultry from cutting their bills.

The lower cover is so arranged that it is held up by locking the top cover of hopper over same, and by raising the top cover the lower cover will fall in place. Simple in construction, easily operated and absolutely "rat" and "mouse" proof.

Price, poultry size, \$1.35
" poultry extra large size, 2.00



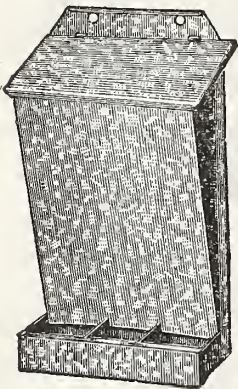
CLOSED.

NORWICH AUTOMATIC FEEDER.

"FILL THE HOPPER AND THE BIRDS DO THE REST."

Fill the hopper with any dry grain feed, or any mixture of dry grain feed, and the revolving bait bar with cracked corn. Stand the Norwich Automatic Feeder anywhere in the yard, pen or house, and put any kind of litter under machine. Adjust valve to feed desired quantity. Adjust legs for required height. Every kernel of grain put in the hopper will go to the flock. Nothing will be lost from any cause. The exercise given by the action of the machine is just sufficient to keep the flock in perfect condition; a few days' trial will show the breeder that the flock will be bright and alert, and with a total absence of dull, stupid, or drooping appearance.

Price—No. 1,	.	.	.	.	.	.	.	\$3.00
No. 2,	.	.	.	.	.	.	.	4.00
No. 3,	.	.	.	.	.	.	.	5.00



Grit and Shell Box.

Made of best grade galvanized iron, in one size only. Has three compartments, for grit, oyster shell and charcoal. Cover lid on a slant prevents fowls roosting on the box and keeps contents clean.

Price, 75 cents.



Dry Food Hopper.

Is similar to the grit and shell box, but is larger and has two compartments, holding 3 quarts in one and 6 quarts in the other.

Price, 85 cents.

Atsatt Chick Feeder.



A neat device for feeding young chicks; they cannot get into it or stand on it. The top removes easily for cleaning or filling. 10 in. long, 4 in. wide. **Price, 35 cents.**



Perfect Chicken Punch.

Chicks may be marked as soon as hatched, without injury.

Price, 25 cents.

Do you keep a record of chickens? There is no better or quicker way than by marking, as many different marks can be made by punching web between the toes. Made in two sizes.

Price, 25 cents.

Philadelphia Poultry Marker.



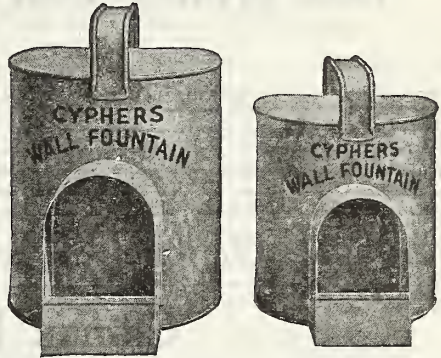
Prices subject to change without notice. (See note on inside first cover.)

POULTRY DRINKING FOUNTAINS.

WALL FOUNTAIN.

The construction of these fountains prevents the water from getting dirty and full of litter. A galvanized iron hood keeps foreign matter from dropping into the water, yet allows fowls to drink readily. They are very convenient to handle, and can be hung up on the wall above the floor, the back of the can being flat. They will not break by freezing.

Price—1 gallon, 80 cents; 2 gallons, \$1.10.



THE "SANITARY" FOUNTAIN.



Made of heavy galvanized iron, perfect in workmanship; most convenient fountain on the market.

A one-gallon fountain will supply twenty fowls.

Price.

1 gallon, \$.85
2 gallons, 1.10

THE SANITARY CHICK FOUNTAIN.

"The Chick" stands five inches high and holds one quart, and its construction gives no chance for the chicks to fall in and get drowned. The square base makes it nearly impossible to tip over.



Price, 35 cents.

THE PEERLESS FOUNTAIN.

Protected from dirt and filth. The fowl cannot injure their combs while drinking. Easy to clean and fill. Made of heavy galvanized iron. Durable and practical.



Price.

5 quart size, 90c.
Chick size, 35c.

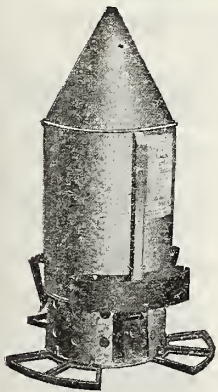


STONE FOUNTAIN.

Price.

1-4 gallon, 20c.
1-2 gallon, 25c.
1 gallon, 30c.

THE Norwich Automatic Air-Lock Fountain.



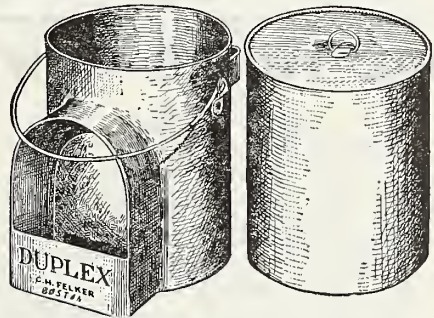
The most perfect device ever placed on the market for automatically supplying pure, fresh water in the poultry house. It is a physical and absolute impossibility to contaminate or pollute the water supply, and requires cleaning about once in three months only. Is practically frost proof. Fitted with detachable cup, removable oil chamber, heat generator, etc.

Made in one size only, 5 gallons capacity.

Price.

Complete with burner base, \$6.00

THE DUPLEX FOUNTAIN.



Top section slides into bottom section.

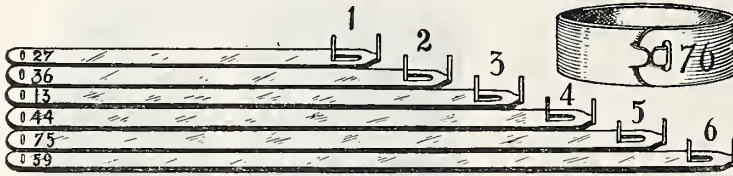
The latest and most practical sanitary fountain on the market. This is a double fount. Keeps the water clean and pure. Easy to fill; easy to care for. Made in two sizes.

Price.

1 gallon, \$.90
2 gallons, 1.20

Prices subject to change without notice. (See note on inside first cover.)

LEG BANDS FOR POULTRY AND PIGEONS.



DOUBLE CLINCH LEG BANDS POULTRY SIZES
CUTS SHOW EXACT LENGTH

DOUBLE CLINCH LEG BANDS.

A BIG SELLER.

Made of aluminum, with large raised numbers.

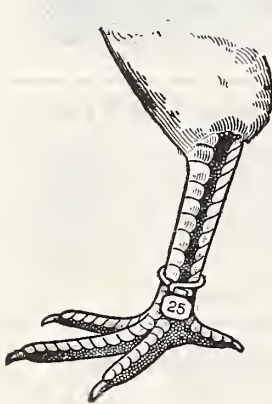
These bands are neat, easily applied, and cannot come off by accident.

In ordering state what breed they are for, and what letters or numbers you wish put on them. Number 3 is the size most generally used for poultry.

Stock constantly on hand, packed in boxes of 100, numbering from 1 to 100.

Price.

85 cents per hundred.



Climax Leg Bands.

Easily Applied and Easily Removed.

One of the oldest and most durable bands on the market. Especially adapted for use on feather-legged fowls, also on turkeys, ducks and geese. Made of round spring wire, tags of aluminum, with neat, plain numbers.

Packed in boxes of 100, numbering from 1 to 100.

Price.

85 cents per hundred.



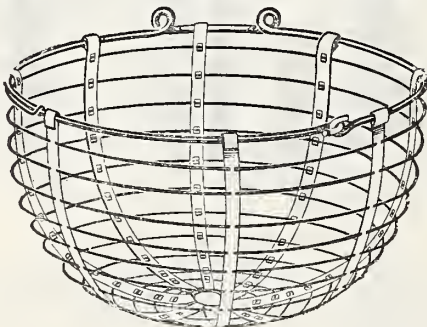
COLORED SPIRAL CELLULOID LEG BANDS.

Will identify birds as far as one can distinguish colors. Indestructible and can be slipped on and off like a key ring.

Red, white, blue, amber, green, black, pink, ruby—a stock of these colors constantly on hand.

Price, 90 cents per hundred.

WIRE HEN'S NEST.



Strongly made of heavy wire, and very durable. Fastens to the wall with two heavy screws. Easily kept clean. No harbor for vermin.

Price, 20c.; \$1.75 per dozen.

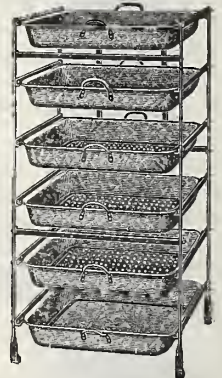
ECONOMY OATS SPROUTER.

The Natural Process for Sprouting.

Contains five sprouting pans and one drip pan 16 x 17 inches. Iron rack is 35 inches high.

By feeding sprouted oats through the winter, egg production can be kept up to a much larger degree than otherwise.

Price, \$5.00.



Prices subject to change without notice. (See note on inside first cover.)



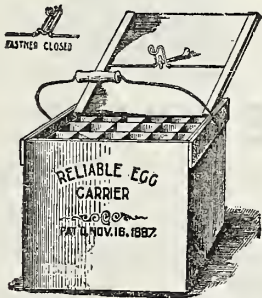
"K. & W." EGG CASE.

The most popular Egg Case in the market and used largely by shippers of eggs.

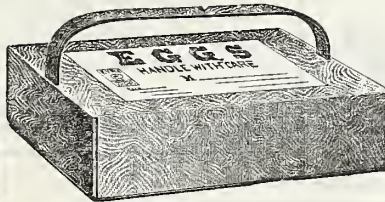
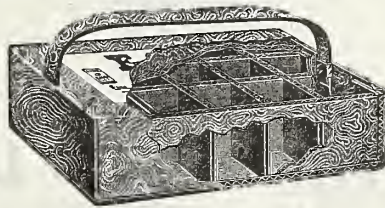
PRICES COMPLETE.

8 dozen	.....	\$ .90
15 "	.....	1.25
30 "	.....	1.75
49 "	.....	2.00
56 "	.....	2.25

RELIABLE EGG CARRIER.



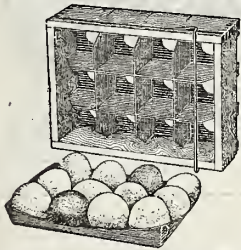
Has a patent fastening on the cover. Each carrier, with a capacity of 12 dozen, complete with fillers. Price, 75 cents.



ERIE SHIPPING EGG BOX.

Unquestionably the best box on the market for shipping safely, fancy eggs by express. Made of heavy corrugated cardboard; very strong, compact, light and convenient. The handle, when put in place, locks the box and it cannot be tampered with in transit; it also prevents the putting of anything on top of the box and thus prevents rough usage. 1 sitting, 20 cts. each, \$1.75 per dozen; 2 sittings, 25 cts. each, \$2.50 per dozen.

STAR EGG CARRIER AND TRAY.



The excellence and economy of Star Egg Carriers appeals to all who deliver eggs. Quickly filled and quickly emptied.

Carriers are made of strong wood, and can be piled deep in the delivery wagon.

PRICE.

No. 1 (1 dozen eggs),	.....	\$4.00 per doz.
No. 1 trays, .	.....	\$4.50 per M.

NEWFIELD POULTRY SHIPPING CRATE.

Made of green elm, then thoroughly dried. Its round corners prevent injury and loss by crowding, so frequent in square cornered crates.

Price, \$1.75.

POULTRY CHARCOAL.

PREPARED EXPRESSLY FOR FEEDING CHICKS AND FOWLS.

Fine powdered, for mash foods for poultry and stock.

Fine granulated, especially for chicks.

Medium granulated, for half-grown fowls and pigeons.

Coarse granulated, for fowls, geese and turkeys.

Price, 50 lb. paper lined burlap bags, \$1.90.



WATER GLASS.

SAVES MONEY AND HELPS KEEP DOWN THE HIGH COST OF LIVING.

Put your eggs down in the spring and summer when they are cheap and keep them fresh for winter use. One gallon makes sufficient solution for fifty dozen. It has been thoroughly tested. Do not trust eggs to water glass of inferior strength. Water glass must be pure and strong to safely protect eggs.

Price, 1 qt., 45 cts.; 1 gal., \$1.00.



Prices subject to change without notice. (See note on inside first cover.)

ALFALFA MEAL.

This makes a green food the year round. It is very high in protein and furnishes to chicks a growing food, which at the same time has a medicinal value.

Price, in 100 lb. bags, \$3.00.

"K. & W." POULTRY REMEDIES.

- Remedy No. 1.** For all forms of indigestion, liver disease, sour crop, crop-bound.
Remedy No. 2. For rheumatism and cramps.
Remedy No. 3. For all sudden colds, with sneezing, watery discharge from eyes and nose. Prevents roup.
Remedy No. 4. For catarrhal colds, with rattling in throat.
Remedy No. 5. For all diarrhoeas of poultry, and particularly in cholera.
Remedy No. 6. For diphtheritic roup and canker.
Remedy No. 7. For chicken-pox, bumble-foot, to promote healing of sores. Cures chronic catarrh.
Remedy No. 8. For soft-shelled eggs, all diseases of egg organs and to correct sterility.
Remedy No. 9. For egg-bound. Also for the diseases where there is swelling of the eye with an accumulation of yellow matter under the lids.
Remedy No. 10. For worms.
- These remedies are put up in tablet form, 100 tablets to a vial. Each label contains full directions for use and the diseases which the remedy will prevent or cure. Price, 40c. per vial. Please order by number



LEE'S LICE KILLER.

A liquid preparation having all the killing properties of any powder or dip; besides, the vapor that it gives off is destructive to insect life, though harmless to fowl. It permeates every crack and crevice of the poultry house, and all the hiding places of vermin and destroys them.

Price.

1 qt., 50c.; 1-2 gal., 75c.; 1 gal., \$1.15.

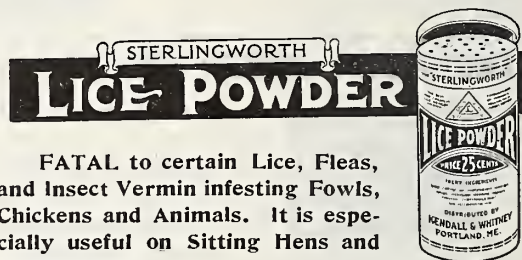
DIRECTIONS.

Work the powder well down to the skin, especially under wings and around the neck. Dust sitting hens thoroughly. Scatter about a teaspoonful of the powder in the nest material.

For Lice on Young Chicks.—Rub small quantities of the powder into the down on the head, neck and back. Then brush the powder out.

Price.

15 ounce package, 25 cents.



FATAL to certain Lice, Fleas, and Insect Vermin infesting Fowls, Chickens and Animals. It is especially useful on Sitting Hens and Young Chicks.

EGG-O-HATCH.

FOR BETTERING THE INCUBATOR HATCH.

Strengthens the chick and weakens the shell.

The most serious problem confronting the poultryman is the percentage of strong, livable chicks that he will receive at hatching time and the percentage that will appear as "dead in the shell." Incubator hatching is different from hen hatching, with eggs of various age and hardness of shell, less frequent shifting or turning and excessive feeding of meat, grain, etc., to breeding stock. Poor hatches are not so often the fault of the incubator as of the eggs. A weak chick in a hard, tough shell has little chance to emerge from the shell, but if you have, at hatching time, strong chicks and weak porous shells, they will not only hatch better but will grow and thrive better after hatching. To save the shell-bound chicks, use "Egg-o-Hatch." **Price, 50 cents.**



"K. & W." ROOFING.

IN 2-PLY AND 3-PLY SINGLE SQUARE ROLLS.

ELASTIC AND DURABLE.

FEELS LIKE RUBBER.

LOOKS LIKE RUBBER.

BETTER THAN RUBBER.

CONTAINS NO TAR.

Large headed nails, cement and directions for laying packed in center of roll.

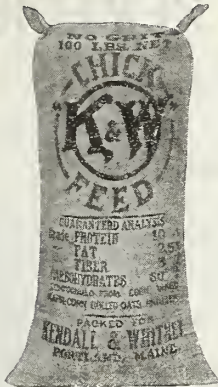
Write for quotations.

Prices subject to change without notice. (See note on inside first cover.)

"K. & W." POULTRY FEEDS.

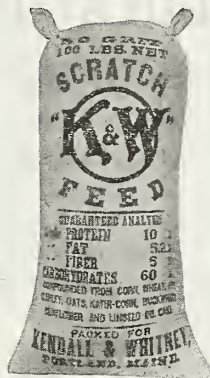
HIGHEST QUALITY AT LOWEST POSSIBLE PRICE.

"K. & W." Chick Feed, Scratch Feed and Poultry Mash.



"K. & W." Chick Feed.

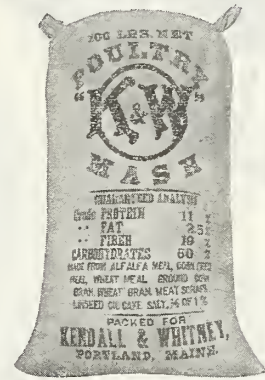
Nothing but sound, sweet ingredients are used. The finest mixture of grain possible for developing growing chicks and poultry.



"K. & W." Scratch Feed.

The "grain feed" for poultry. Will keep fowls healthy, affording them plenty of exercise; an ideal "scratch feed."

Write for quotations.



"K. & W." Poultry Mash.

A complete mash, which can be fed either wet or dry, at any time during the day. Is a highly nutritious balanced ration for laying hens, as it is high in egg-making qualities.



GREENE'S "FIRST FEED."

"First Feed" is prepared solely for baby chicks and is made from white corn and yellow corn meal, shredded codfish, ground hulled oats, dried milk, entire wheat, cod livers, ground flaxseed, gluten meal, dried blood, shell lime and fine ground meat scraps, steam cooked, mixed in proper proportions. Five pounds of "First Feed" will feed one hundred chickens for the first week.

Package, 30 cents.

Write for quotations for 25 lb., 50 lb. and 100 lb. bags.

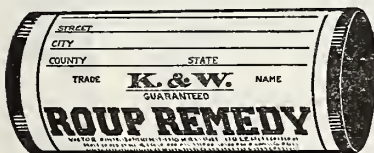
POULTRY FOODS AND SPECIALTIES.

"K. & W." Oyster Shells.
Chicken Grit (fine).
Pigeon Grit (medium).
Poultry Grit (coarse).

Bone Meal.
Poultry Bone.
Beef Scraps.
Bone and Meat Meal.

Sunflower Seed.
Tobacco Dust (in bulk).
Powdered Tobacco (in packages).
Nest Eggs.

Write for quotations.



"K. & W." ROUP REMEDY.

Will cure any case of roup, if used according to directions.

Price, per pkg. (makes 25 gals.),
25 cents.



STERLINGWORTH DIARRHOEA REMEDY.

A reliable remedy for diarrhoea, dysentery and other kindred bowel troubles in young chickens, full-grown fowls and pigeons. Keep it on hand and use it as a preventive. It is a powder for use in the drinking water. The chickens and fowls take their own medicine.

Price, per box, sufficient for several flocks, 50 cents.

LAMBERT'S DEATH TO LICE POWDER.

15 oz. pkg., 25c.; 3 lb. pkg., 50c.; 6 1-4 lb. pkg., \$1.00.

"STERLINGWORTH" FISH FOOD.

A pure food, prepared especially for feeding gold fish, etc.

Price, 10 cents per package.

Prices subject to change without notice. (See note on inside first cover.)



ANIMAL AND POULTRY REGULATORS AND REMEDIES. BABY CHICK FOOD.

SATISFACTION GUARANTEED OR MONEY BACK.



Healthy Birds and Lots of Eggs, the Two Big Things in Poultry Raising, Are Made Certain by Giving
Pratt's Poultry Regulator.

It builds up vitality, insures sound digestion, sharpens appetite and prevents disease, thus putting birds in condition for heavy egg laying or winning blue ribbons. Pratt's is the original Poultry Regulator of America and is in use by the most successful poultry raisers everywhere.

When regularly used, hens lay throughout the year.

It will prevent chicken cholera, gapes, roup, rheumatism, expel worms, prevent leg weakness and egg eating. It will greatly improve turkeys, geese, ducks, pigeons and guineas, insuring quick growth and keep them free from disease.

25 lb. pail, \$3.00; 12 lb. pail, \$1.75; packages, 30c. and 60c.



Don't Let ROUNG Out Your Profits. The Sure and Easy "Dunce of Prevention" against This Dangerously Contagious Disease Is
Pratt's Roup Remedy.



Quickly absorbed by the blood, purifies the system, reduces fever, allays inflammation. The safe remedy for roup, colds, catarrh and all bad weather diseases.

Tablets, 25c. and 50c.

When Baby Chicks Come, Keep Them Healthy and Growing and Bring even the Weak Ones along by Feeding

Pratt's Baby Chick Food.



A largely predigested baby food for baby chicks. Guaranteed to raise every livable chick. Costs a cent a chick for three weeks. Prevents leg weakness, white diarrhoea, "pasting up" and other chick diseases.

25 lbs., \$2.25; 50 lbs., \$4.25.
Packages, 30c. and 60c.

More Work out of Your Horses; More Milk from Your Cows; Fatter Hogs—These Are a Few of the Benefits Which Come from Using

Pratt's Animal Regulator.

Always sold on a guarantee that it will satisfy you or money back.

12 lb. pails, \$2.50
25 lb. pails, 3.75
are popular with our customers.

Packages at
\$1.20, 60c., 30c.



Pratt's Powdered Lice Killer.

Effective without Causing Irritation to Lungs or Skin.



It quickly and thoroughly kills all lice on little chicks, big chicks, sitting hens and incubator chicks. It rids horses, cattle, hogs, dogs and cats of lice, and destroys ticks on sheep. A valuable deodorizer and disinfectant, for all poultry houses, barns, stables and dwellings. Drives out moths from closets, furniture, carpets and clothing.

Package, 30c.

Pratt's Head Lice Ointment

causes immediate death to the head lice which kill so many thousands of little chicks yearly. Head lice weaken the chick's health, and a chick in weakened condition easily contracts many other diseases. Pratt's Head Lice Ointment prevents this. It is non-poisonous, and is also the best remedy for scaly legs. Sold in 25c. tins.



The Time to Save Baby Chicks from White Diarrhoea, the Most Deadly of All Chick Diseases, is before They Get It. Begin with the First Drink of Water, as soon as They Are Hatched, and Use

Pratt's White Diarrhoea Remedy.

Remember the germs are in the chicks when hatched, being transmitted from the eggs. Keep the germs from becoming active by using this remedy.

It also cures many other germ diseases so similar as to be often confused with white diarrhoea.

Package, 25c.



Pratt's Poultry Disinfectant.

If poultry keepers would regularly spray the chicken houses, roosts, dropping boards and utensils with Pratt's Poultry Disinfectant, most all of their troubles would vanish. This great disinfectant is a real wonder-worker in the poultry yard. Put up in 1 quart, 50c., and 1 gallon cans, \$1.50.



Pratt's Conditioner.

Not a Feed—a Conditioner.

A medicinal preparation for horses, cattle, sheep, hogs and young pigs, purifying the blood, regulating the bowels and digestive organs, preventing indigestion and loss of appetite, and assuring, in all stock, a sound and vigorous condition.

7 lb. packages, 60c.
12 lb. pails, \$1.25; 25 lb. pails, \$2.25.

Prices subject to change without notice. (See note on inside first cover.)

INTERNATIONAL STOCK FOOD TONIC.

3 Feeds for One Cent.



BIGGER LIVE STOCK PROFITS

can be made from every animal on your farm. You can rapidly increase the weight of your hogs, beef cattle and sheep—you can greatly increase the milk flow of your cows—you can get more work from your horses—through the use of this food tonic.

FOR COWS.

International Stock Food Tonic helps cows to give a greater milk yield as it causes the nutritious elements of their grain feed to be assimilated and thereby provides more milk and butter fat. Many of our customers state that its use has made a big increase in the milk flow of their cows. Some state that it, has doubled and even more than doubled it.

FOR HORSES.

International Stock Food Tonic enables horses to perfectly digest and assimilate a far greater proportion of their food than they would without it. This, in a great measure, prevents the great waste of grain passing through the system unassimilated. With improved assimilation the grain is converted into flesh, bone and muscle. This means greater strength and endurance and a big saving in grain feed.

FOR HOGS.

International Stock Food Tonic will help to cause all feeds given to hogs to be assimilated into the system where they go right into extra weight. The amount of high priced grain feed given to hogs matters little unless they digest and assimilate it. When you raise hogs you might as well raise BIG ones and **International Stock Food Tonic** will help you do it.

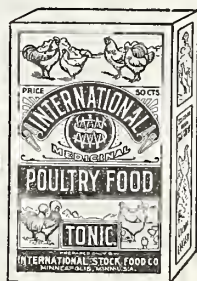
In packages, 30c., 60c., \$1.20; in pails, \$4.00.



MAKE MUCH MORE MONEY with your Poultry by using **INTERNATIONAL POULTRY FOOD TONIC.**

HELPS TO MAKE HENS LAY MORE EGGS AND **HELPS TO KEEP POULTRY HEALTHY.**

In packages, 30c., 60c., \$1.20.



CARBONOL IN THE HEN HOUSE.

Carbonol should be used as a general disinfectant in hen houses to keep them clean and healthful, kill lice and destroy any disease germs before they have a chance to infect the flock.

LICE AND ALL KINDS OF VERMIN

may be destroyed on poultry, pigeons, etc., by painting roofs and spraying floors and walls of their coops and houses with a 1-65 solution of **Carbonol** (about one tablespoonful to a quart of water).

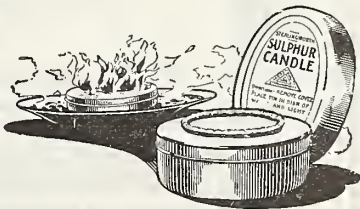
PRICE.

4 ounce bottle, 25c.; pint bottle, 50c.; quart bottle, 75c.; 1 gallon can, \$1.85.

Sterlingworth Sulphur Fumigating Candle.

The candle is made from pure, high grade sulphur, and has a circular wick, which, when once lighted, stays lighted. Is especially useful to poultrymen in ridding poultry houses of insect pests, as the vapor from it penetrates crevices not reached by other means.

In circular tin box, price 15 cents.



Prices subject to change without notice. (See note on inside first cover.)

BLATCHFORD'S CALF MEAL

The Complete Milk-Equal



"Good to the last drop"

Just the thing to raise your calves right from birth.

Then sell your milk and get the benefit of the high creamery prices.

No more scouring calves.

It is absolutely the only milk-substitute that contains all the elements necessary for rapid and healthy growth, and the only calf meal that is thoroughly cooked and prepared for digestion. Will push calves forward better and quicker than any other food.

Sold in 100, 50 and 25 pound bags

100 pounds makes 100 gallons of Complete Milk-Substitute

From Sow to Pasture

Wean your little pigs easily, safely and cheaply on

Blatchford's Pig Meal

From Pig-hood to Pork-age it gives big bone and solid flesh. Prevents loss of growth and vitality during the critical weaning period, and always

makes the runts catch up.



Sold in 100, 50 and 25 lb. bags

Blatchford's "Fill the Basket" Egg Mash

fed to your pullets when three months old, will make early layers and keep them in perfect health. Does not force or fatten. Feed it to all your hens.



Make your egg profits sure



Sold in 100 and 25 lb. bags

BLATCHFORD'S MILK MASH

Saves Your Baby Chicks and Ducklings

Contains just the right combination of milk, milk-substitutes, meat and grains necessary for the best results.

Prevents bowel trouble, leg weakness and white diarrhea. It should be every chick's first feed! It carries them safely through the dangerous first three months. Raises 95% of every hatch!

Five pounds per chick will do it.

Grows—Matures—Fattens

Sold in 100 and 25 pound bags and in 4 pound trial cartons



2 1/4 pounds at 8 weeks!



NOTE: Larger and quicker profits to the farmers, stock-raisers and poultrymen are the real reasons for the success of the Blatchford Milk-Substitutes. Satisfied customers have been the cause of the steady annual increase in the Blatchford business for over thirty-five years in the United States.

We sell and recommend all of the Blatchford products, including special milk-substitutes for colts and for lambs. Write for prices.

PRAY'S PATENT ICE PLOW.

This plow is especially designed to meet the demand for a cheap and efficient ice cutter for farmers and dairymen. It will cut from 20 to 40 tons an hour, cutting the ice blocks of uniform size, which saves much labor when packing.

The extra weight of the rider holds the plow to its work and allows the horse to be hitched much closer to the plow—an advantage where the pond is small and all the ice needed from the edge of the pond.

It is the only plow that can be successfully used by one person. The draft back of runners omits the necessity of leader or rider.

It is the only plow that has an adjustable tooth.

It is the only plow that works with runners.

It turns easier at the end of the row than any other plow.

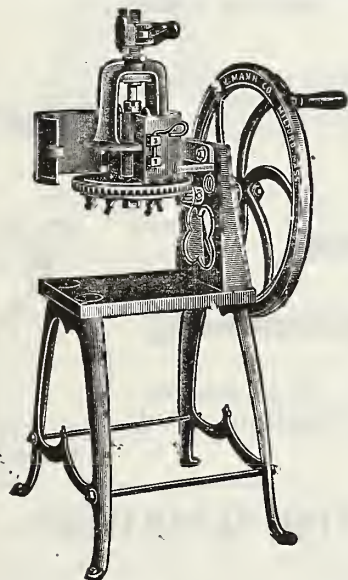
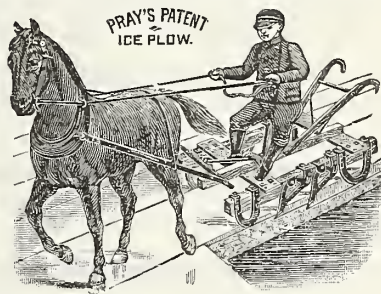
It cuts ice with more economy on a small pond than any other plow.

A horse and one man can cut as much ice as ten men with saws.

Upon a shallow pond where a saw cannot be used this plow is indispensable.

WARRANTED TO WORK AS REPRESENTED.

Price, Four-Tooth Plow, \$16.00; Six-Tooth Plow, \$21.00; Eight-Tooth Plow, \$23.00.



No. 9.

Mann's Bone Cutters.

THE STANDARD OF EXCELLENCE.

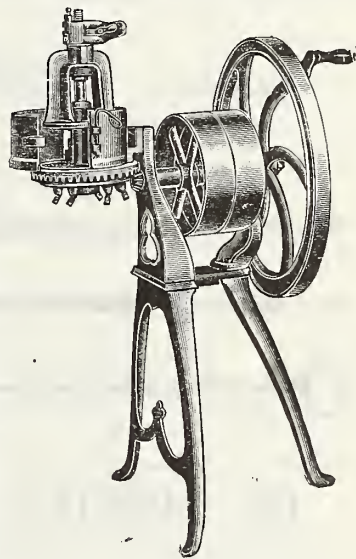
A STANDARD WHICH HAS ONLY BEEN OBTAINED BY YEARS OF EXPERIENCE.

PRICE LIST.

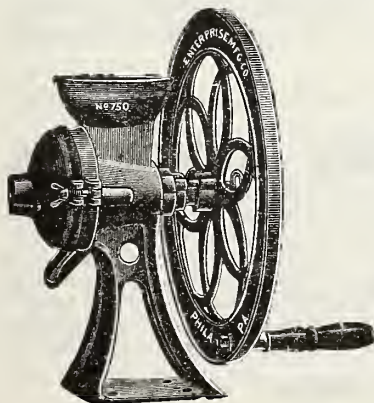
NO DISCOUNT FROM THESE PRICES.

No. 5C (with Crank Handle),	\$ 9.50
No. 5B (with Balance Wheel),	12.50
No. 5BM (with Bal. Wheel and Iron Stand),	16.00
No. 7 (with Balance Wheel),	18.50
No. 7 1-2 (Semi-power Machine),	25.00
No. 9 (Stand. Bone Cutter),	28.50
No. 11 (Comb'n Power Cutter),	40.00
No. 12 (Small Power Cutter),	50.00
No. 15 (Large Power Cutter),	100.00
No. 14 (Large Power Cutter),	125.00

Send for Illustrated Catalog.



No. 7 1-2.



ENTERPRISE HAND MILL.

In this mill are embodied all the good features of other hand grinding mills, to which have been added universal burrs or grinding plates that are adjustable for grinding coarse or fine. This machine grinds oats, barley, rye, corn, peas, dry bone, shells, etc., for feeding to poultry. It is a well designed machine, is strong and well made throughout and of excellent finish; has a heavy fly wheel and is light running.

Capacity, 1 to 2 bushels per hour.

Price, \$9.00.

Prices subject to change without notice. (See note on inside first cover.)

ICE TOOLS.

Everything in ice harvesting tools and supplies for ice men, dairymen and farmers. Complete illustrated catalog sent upon request. **Write us for pamphlet "How to Harvest Ice."**



Bar Chisel.

Breaking Bar.



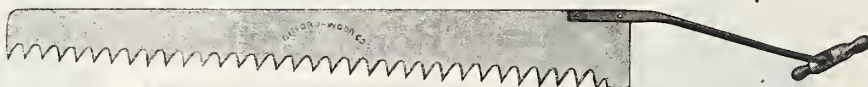
Splitting Fork.

Ice Shaver.



Splitting Chisel.

Ice Saw.



Ice Hook.

Line Marker.



Ring Handle Splitting Chisel.

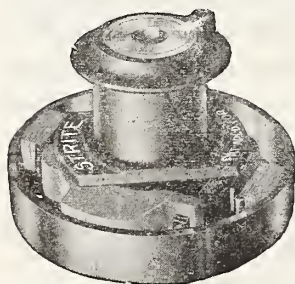


Tongs.

THE RANDOLPH GOVERNOR PULLEY FOR SEPARATORS.

Absolutely governs the speed of the separator, releasing automatically when the proper speed is attained and absorbing all shocks from the gasoline engine. It runs in either direction without any change or adjustment. The pulley standard can be placed on the floor, side wall, or overhead, to suit conditions. Embodied in the construction of this pulley is the loose pulley feature, whereby the separator may be stopped without stopping the engine. Attention is called to the fact that after the proper speed has been attained by setting the jamb nuts on the hand wheel thread, the correct speed will be maintained without further attention.

Price, \$10.00.



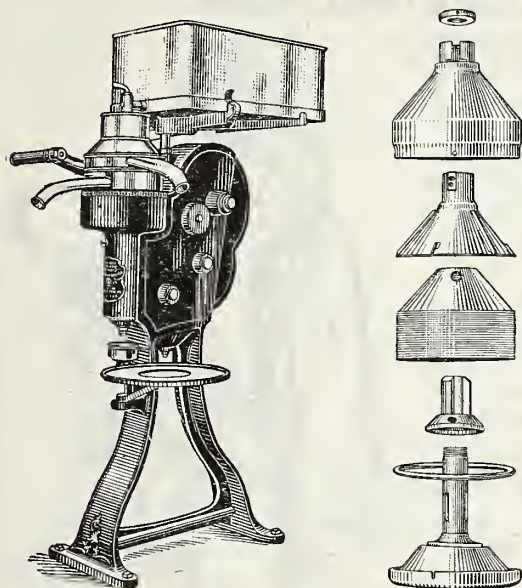
The Strite Governor Pulley for Separators.

The governor pulley is not placed directly upon the cream separator, but must be placed either upon the engine shaft or upon a line shaft or counter shaft, either of which must run 200 revolutions per minute or more. The shaft can vary in speed anywhere from 200 to 1,000 revolutions without affecting the speed of the cream separator. To drive any make or size of hand power cream separator successfully, place an ordinary 12-inch pulley upon the shaft where the hand crank is attached. With this governor pulley you could start your power in motion full speed and the cream separator would require from 2½ to 3 minutes in coming up to its full speed. The governor pulley is bored to fit different size shafts, smallest size 15-16 inch, largest size 2½ inches.

Price, No. 1, \$6.50.

Prices subject to change without notice. (See note on inside first cover.)

THE UNITED STATES CREAM SEPARATOR, WITH SELF-BALANCING DISC BOWL.



The attention of our dairyman friends is called to the **new U. S. disc bowl**—an important addition to the U. S. Cream Separator line—of exceptional interest to the many thousands who prefer a disc type skimming device.

A glance at the picture on this page will assure our many friends and customers that in the new U. S. Separator is continued the same famous U. S. construction, time tested for a score and more years—never radically changed—best without question; **to which superior construction a new disc bowl of surprising efficiency is added.**

THE UNITED STATES SEPARATOR IS FORTIFIED AGAINST EXTREMES OF TEMPERATURE.

WHEN IT IS WINTER.

When you are using a U. S. Cream Separator you don't have to heat a kettle of water to start the skimming. It works cold.

When the oil in other separators has clogged or frozen up, the U. S. Separator, with no kinks, bends, or goose necks in its oil tube, is running smoothly and silently, perfectly lubricated.

When every liquid is freezing solid, you don't have to worry about the bowl of the U. S. Separator being damaged by neglect. It empties itself automatically—always!

When the gas engine "dies," if you are using power, the U. S. has a hand crank on the other side, and you can "go to it!"

WHEN IT IS SUMMER.

When the cream is skimmed by a U. S. Separator, it keeps longer, for it is the first and only separator remarkably fortified in sanitary ways from top to bottom. Bacteria are "up against it" like flies in January.

When other separators get "vile" the U. S. is sweet and clean, with no milk drip on the frame, or in the gear case, or in the iron bowl chamber. The removable sanitary liner prevents.

When ordinary separators are turning the new batch sour, with bowl left full from the previous run, the U. S. is starting fresh and dry, the bowl having drained itself without attention.

When washing-up time comes, there are fewer parts to clean. With the mechanical washer U. S. users are through in one-third the time. Time in summer is especially valuable.

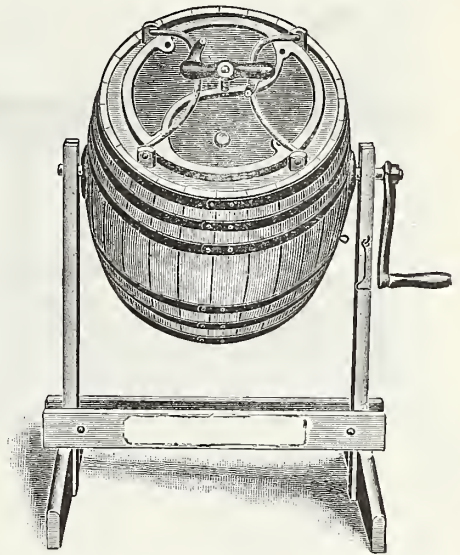
Prices subject to change without notice. (See note on inside first cover.)

THE BELLE CHURN.

ONE OF THE BEST BARREL CHURNS MADE.

This churn is made in the most thorough manner and of kiln-dried white oak. It will last for years. The principle is concussion and not friction—has no floats or paddles inside. It is easily operated and easily cleaned. Perfect in construction, and having no parts liable to break or get out of order, it fully meets the requirements of large or small dairies.

No.					Price.
0	6 gallon, churns from 1 to 3 gals. cream.....				\$ 6.00
1	10 " " " 1 to 5 " "				6.50
2	15 " " " 1 to 7 " "				7.50
3	20 " " " 2 to 9 " "				8.25
4	25 " " " 2 to 12 " "				10.50
5	35 " " " 3 to 16 " "				12.00
6	60 " " " 6 to 22 " "				16.25



THE STODDARD CHURN.

Similar in Construction to the Belle.

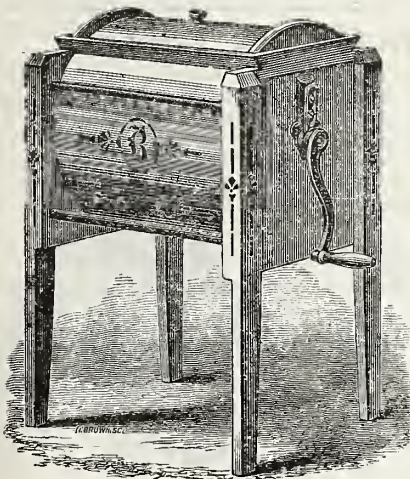
No.		Price.	No.		Price..
1	10 gal., churns from 1 to 4 gals. cream .	\$14.85	5	35 gal., churns from 5 to 16 gals. cream .	\$23.00
2	15 " " " 2 to 7 " "	15.75	5½	45 " " " 5 to 20 " "	28.00
3	20 " " " 3 to 9 " "	17.75	6	60 " " " 6 to 28 " "	33.00
4	25 " " " 4 to 12 " "	19.80			

THE BLANCHARD CHURN.

The following are the leading merits of the BLANCHARD CHURN:

Perfect quality of all materials used. Excellency of manufacture. Simplicity of construction, having no cog wheels or gearing. Durability. Ease of operation. The action of the dasher is such as to cause agitation of the cream by creating currents, and not by beating or by friction of the cream, which may injure the grain of the butter. Facility in removing the dasher and getting at the butter. Ease of cleaning; the form of construction making the inside without any inaccessible or invisible angles or corners.

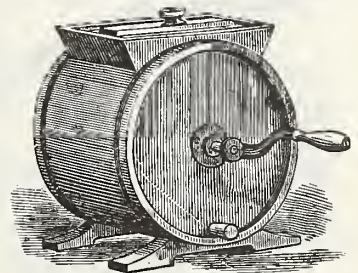
		Price.
No. 3, for up to about 2 gallons of cream.....		\$ 9.00
No. 4, " " 4 " "		10.75
No. 5, " " 6 " "		12.00
No. 6, " " 12 " "		15.25
No. 7, " " 16 " "		18.25



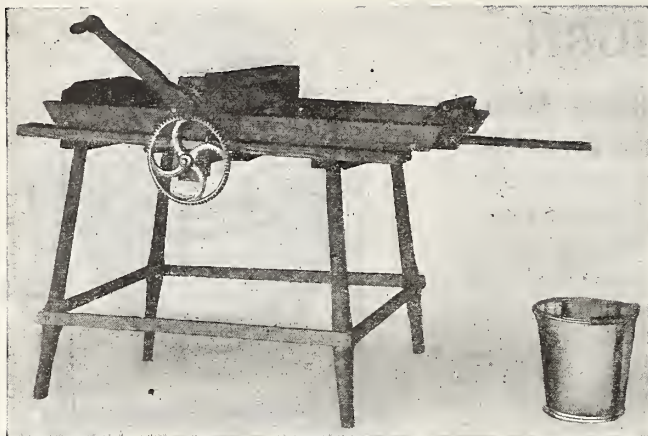
CYLINDER CHURN.

A favorite style of churn which has been in use for many years.

No.		Price.
No. 1, capacity 2½ gallons.....		\$4.00
No. 2, " 4 "		4.50
No. 3, " 7 "		5.25
No. 4, " 10½ "		6.00



Prices subject to change without notice. (See note on inside first cover.)



THE WATERS BUTTER WORKER.

Practical, efficient, durable. It combines more advantages than any other. The tray is removable and thus takes the place of the butter bowl.

Will work butter in any condition satisfactorily. Made in sizes to suit any dairy or factory.

Size No.	Length of Tray.	Width of Tray.	Capacity.	Price.	Size No.	Length of Tray.	Width of Tray.	Capacity.	Price.
0.	27 in.	14 in.	1 to 15 lbs.	\$10.50	3.	39 in.	20 in.	5 to 50 lbs.	\$15.00
1.	36 in.	15 in.	5 to 30 lbs.	12.00	4.	48 in.	22 in.	10 to 75 lbs.	18.00
2.	36 in.	18 in.	5 to 40 lbs.	13.50					

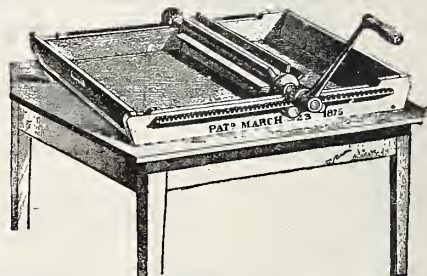
Reid's Patent Butter Worker.

These machines are all built of the best material.

The iron part is galvanized, preventing rust.

No.	Size.	Depth Inside.	Capacity.	Price.
1.	23 x 36 in.	2½ in.	50 lbs.	\$10.00
2.	20 x 36 in.	2½ in.	30 lbs.	8.00
3.	17 x 27 in.	2½ in.	20 lbs.	7.00
4.	14 x 23 in.	2½ in.	10 lbs.	6.00

Three pounds can be worked in any of the above machines, as well as a larger quantity. In buying a worker you should choose a size that will work the largest quantity that you will be likely to want to work at a time.

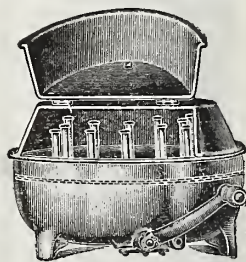
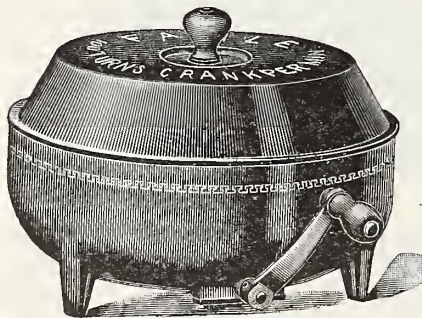


The "Facile" Improved Babcock Milk Tester.

"The "Facile" Tester has taken the lead over all other Babcock machines, not only among creameries and cheese factories, but in State Experiment Stations and Dairy Schools. Several attempts have been made to copy the machine, but so far nothing has been produced embodying all of its desirable features, and it remains to-day the leading Babcock machine.

Prices include full set of glassware, comprising test bottles, pipette and acid measure; also test bottle brush and bottle of acid.

2 bottles,	\$ 6.00	10 bottles,	\$17.00
4 "	7.00	12 "	18.00
6 "	15.00	24 "	45.00
8 "	16.00		



COOLEY CREAMER.

"REFRIGERATOR" STYLE.

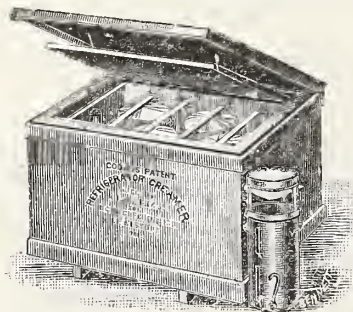
"Refrigerator" style has double walls, with two air spaces and two covers, and not being readily affected by heat or cold will require much less ice in the summer season than a single wall tank, and the water will not freeze in the winter season.

No. 2 is for four cans; No. 3, for six cans; No. 4, for eight cans; No. 5, for ten cans; No. 6, for twelve cans; No. 7, for fourteen cans; No. 8, for sixteen cans.

Prices quoted on application.

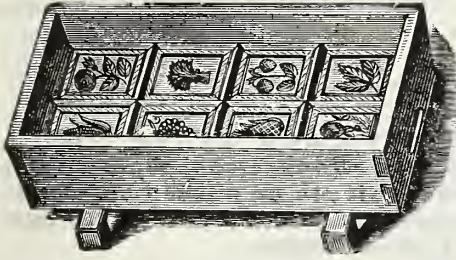
PRICES DO NOT INCLUDE CANS.

COOLEY CANS, SEPARATE FROM TANK, \$5.00.



Prices subject to change without notice. (See note on inside first cover.)

COMBINATION BUTTER MOULDS.



These moulds are expressly designed to meet the demand for strictly first-class, hand-carved designs.

The cut here shown represents No. 6, which holds two pounds, and is divided into eight $\frac{1}{4}$ -pound cakes.

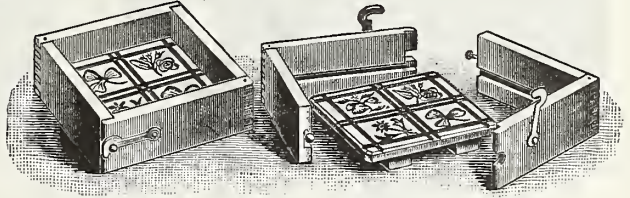
Prints engraved to order, with ordinary designs, initials or monogram, without extra charge, excepting that, should more than six letters be wanted on each cake, a charge of five cents per letter will be made for each letter in excess. Prices quoted on application for special or complicated designs or lettering.

No. of Prints.	No. of Cakes.	Capacity in Pounds.	Capacity of Each Cake in Ounces.	Dimensions of Moulds in Inches.	Dimensions of Each Cake.	Price.
2	4	2	8	11 x $3\frac{3}{4}$	$3\frac{3}{4}$ x $2\frac{3}{4}$	\$4.50
3	4	2	8	12 x 3	3 x 3	4.50
4	4	1	4	$4\frac{1}{2}$ x 5	$2\frac{1}{4}$ x $2\frac{1}{2}$	4.25
5	4	1	4	10 x $2\frac{1}{2}$	$2\frac{1}{2}$ x $2\frac{1}{2}$	4.50
6	8	2	4	10 x $4\frac{1}{2}$	$2\frac{1}{4}$ x $2\frac{1}{2}$	5.25
7	6	$1\frac{1}{2}$	4	10 x $3\frac{1}{2}$	$3\frac{1}{2}$ x $1\frac{3}{4}$	5.00
8	12	$1\frac{1}{4}$	2	12 x 4	2 x 2	5.25
9	16	1	1	10 x 3	$1\frac{1}{2}$ x $1\frac{1}{2}$	5.25
10	24	$1\frac{1}{2}$	1	10 x 4	$1\frac{1}{4}$ x $1\frac{1}{3}$	6.00
12	8	4	8	11 x 5	$2\frac{3}{4}$ x $2\frac{1}{2}$	5.25
20A	4	2	8	11 x $4\frac{1}{2}$	$3\frac{1}{2}$ x $2\frac{1}{2}$	4.50

BLANCHARD BUTTER MOULDS.

**1-2 lb., two 1-4 lb. prints, 65c.;
1 lb., four 1-4 lb. prints, 85c.; 2 lbs.,
eight 1-4 lb. prints, \$1.15.**

If engraved with initials, or any hand carving, add to the REGULAR PRICE, 25 cents for each cake so engraved.



TUB COVER FASTENERS.

Made from tin; easily applied, easily withdrawn. Tin is turned back over head of nails; impossible for nails to drop out.

1,000 in a package. Price, \$1.50 per thousand.

BRUSHES.

We are in a position to furnish the best kind of brushes for dairy use, and recommend especially our line of can, separator and bottle brushes.

Bottle Brushes	30c. and 45c.	Separator Bowl.....	40c.
Test Bottle.....	10c.	Separator Tube	20c.
Milk Can.....	50c.	Separator Cover Spouts.....	20c.
Separator	25c.		

SPECIAL PRICES FOR LARGE QUANTITIES.



No. 86 and No. 120 (larger size, same style). Black Bottle Brush, 45c.



No. 60. Black Bottle Brush, 30c.



Cover Spout Brush, 20c.

Prices subject to change without notice. (See note on inside first cover.)



Milk or Cream Bottles.

Refuse to receive milk in any other than **glass bottles**, as it is the only way by which you can get milk that is **sweet** and **pure** and that has not come in contact with the numberless street odors, flies, and many other undesirable influences.

The "COMMON SENSE" bottle, capped by a strong, clean paper cap, is the BEST, as it can be washed absolutely CLEAN, and no taint is possible in milk put up in these bottles.

	Per Dozen
1-2 Pint, Common Sense,	\$.55
1 Pint, Common Sense,	.65
1 Quart, Common Sense,	.80
1-2 Pint, Lightning (tin top),	.65
1 Pint, Lightning "	.75
1 Quart, Lightning, "	.90

Price for gross or more quoted on application.

GLASS WARE FOR BABCOCK TEST.

	Each.
Lactometer (Fig. 91), for testing quality of milk,	\$.75
Floating Dairy Thermometer (Fig. 93),	1.35
Flange Dairy Thermometer (Fig. 92),	.50
Babcock Test Bottles (for milk), 10 to 25%,	.35
Babcock Test Bottles (for cream), 30 to 50%,	.40
Pipettes,	.25
Acid Measures,	.25



91



93



92



Cream Bottle.



Milk Bottle.



Acid Measure.



Pipette.

Prices subject to change without notice. (See note on inside first cover.)

145 FARM USES

FOR

Safe-Clean
Powerful
Saves Time



Not a Poison
Leaves No Odor
Saves Labor

DISINFECTANT DEODORANT ANTISEPTIC

Note These Remarkable Qualities of B-K

Powerful. By Government Method test B-K has over ten times greater germ-killing strength than carbolic acid. Much stronger than coal tar disinfectants—much safer.

Safe. B-K contains no poison, acid nor oil.

Clean. B-K is colorless, leaves no stain on floors or walls.

Deodorant. B-K destroys foul odors—leaves no odor of itself. Does not soil animal's hair.

Cheap to Use. B-K is so much stronger than other disinfectants that more water is used. It goes farther.

Put Up for Dairy and Farm Use in
1 Quart for \$1.00 1 Gallon for \$2.50
5 Gallon Carboy for \$11.00

USE B-K FOR

Prevention of—	Sterilizing
Contagious Abortion	Milk Cans, Bottles
Retained After-birth	Separators
Barrenness	Milking-machines
Calf Scours—Bloat	Deodorizing
Hog, and Poultry	Cleaning Cows
Barn Disinfecting	Home Sanitation

EVERY USE OF B-K SAVES WORK
Sold Under the Manufacturers Guaranty

MANUFACTURED ONLY BY

General Laboratories
Madison, Wisconsin

Milking Machines



Spray Barns and Stock



Save Every Calf



Hog Sanitation



Incubators



Laundry



Sickroom



Refrigerator



Garbage Can



Ask for Farm Bulletin No. 317

B-K · B-K · B-K · B-K · B-K · B-K · B-K · B-K · B-K · B-K · B-K · B-K · B-K · B-K · B-K · B-K · B-K · B-K



MILK BOTTLE CAPS.

No. 1, No. 2 and No. 3 size, plain or printed caps, 40c. per 1,000.
In cases of 5,000, \$1.85 per case.
No. 1, No. 2 and No. 3 size, plain or printed "lip" caps, 45c. per 1,000.
In cases of 5,000, \$2.10 per case.
Special price on barrels containing 50,000 caps.

Acid—For Babcock Test.

PURE, CLEAR, FREE FROM SPECKS.

We guarantee this acid to be of proper strength for making tests.
By the pound or in carboys. Price on application.

WYANDOTTE DAIRYMEN'S CLEANSER AND CLEANER.

A powder especially compounded for use in the dairy and creamery for washing all dairy utensils, glass and tin ware, in a most satisfactory and sanitary manner. The use of this powder means absolute cleanliness.

Price, 5 lb. bags, 35c.; 80 lb. kegs, \$4.90; 280 lb. barrels, \$14.30.

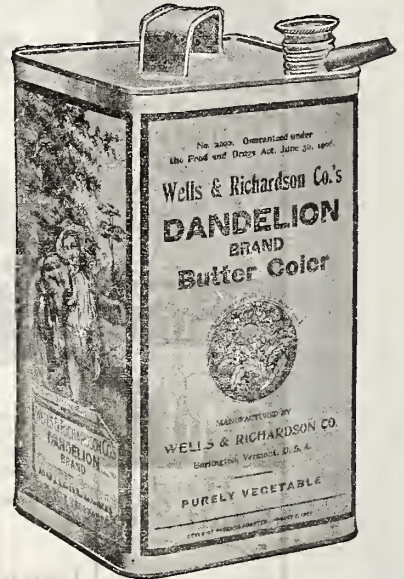
**WELLS & RICHARDSON CO.'S
Dandelion Brand Butter Color.**

PURELY VEGETABLE.

Will not become rancid. Will not color the buttermilk.
Gives a bright June color. Always gives satisfaction.

PRICE.

Small size,	to color about	500 pounds.....	\$.25
Medium size,	" "	1250 pounds.....	.50
Large size,	" "	2800 pounds.....	1.00
Cans,	1 gallon.....		2.50



HANSEN'S DANISH RENNET TABLETS.

FOR CHEESE MAKING.

Always of the same strength, entirely preservable, separates the cheese matter completely, and gives the greatest quantity possible.

PRICE.

Package of 25 tablets, 75c.; can of 200 tablets, \$5.50.

HANSEN'S DANISH BUTTER COLOR.

The Most Uniform, the Purest and the Most Natural Shade.

Made with the finest imported vegetable oil.

To butter makers desiring a pure, vegetable butter color, we do not hesitate to recommend Hansen's Danish as unquestionably the best in every respect.

Its high quality has never been approached by any competing preparations, and many shippers of the finest butter demand its exclusive use by their butter makers.

PRICE LIST.

Small size,	to color about	500 pounds	\$.25
Medium size,	" "	1250 pounds.....	.50
Large size,	" "	2800 pounds.....	1.00
Cans,	1 gallon.....		2.50



Non-Returnable Butter Shipping Boxes.

These boxes are furnished in shook, and are made in the following standard sizes, 25 boxes in a package: 10 pounds, with printed ends; 20 pounds, with printed ends; 32 pounds, with printed ends; 40 pounds, with printed ends; 48 pounds, with printed ends; 60 pounds, with printed ends.

Write for quotations.

Prices subject to change without notice. (See note on inside first cover.)

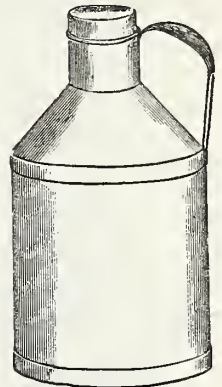
MILK CANS.

We can furnish Tin, Wood Stopper Milk Cans in any style, size or quantity.

20 QUART AND 40 QUART SHIPPING CANS.

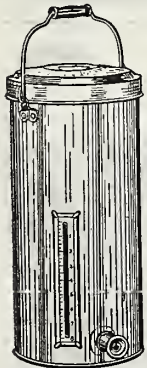
The parts of all our shipping cans are made of steel and heavily tinned by the hand dipping process, after they are formed.

Prices furnished on application.

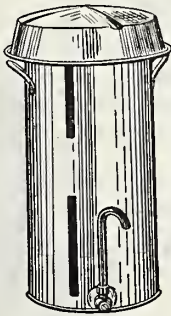


Milk Can.

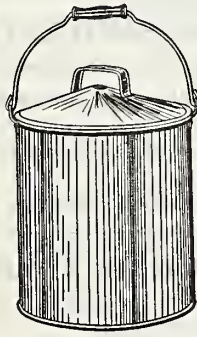
CREAMERY CANS.



"K. & W." Can.



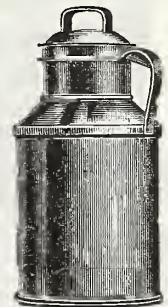
Cooley Can.



Cream Pail.



40 Qt. Shipping Can.



20 Qt. Shipping Can.

"K. & W." Creamery Can,	.	.	.	.	.	\$2.25
Cooley Creamery Can,	.	.	.	.	.	5.00
Goss Creamery Can,	.	.	.	.	.	4.00

CREAM PAILS.

6 gallon,	.	.	.	.	.	\$3.50
10 gallon,	.	.	.	.	.	4.00



"Wonpeace" Can.

"Wonpeace" Milk Can.

NOT A SINGLE SEAM ANYWHERE.

An idea that will delight milk-can users. Strictly seamless in every sense of the word. The whole bottom, body, breast, neck and bowl, all out of a single sheet of steel. Easily kept absolutely clean.

PRICE.

40 quart size,	.	.	.	.	.	\$9.50
20 quart size,	.	.	.	.	.	7.50

Prices subject to change without notice. (See note on inside first cover.)

CHAMPION MILK COOLER AND AERATOR.

A perfect aerator, removing all flavors arising from excessive cabbage, turnip or silo rations.

A complete deodorizer, removing the animal heat or cowny taste and all odors arising from the absorption by the milk of stable or other unpleasant gases.

A thorough cooler, reducing the temperature of the milk in one minute nearly to the temperature of the cooling medium.

It is equally well adapted to the use of any cooling medium, either running water, ice water, or, if a very low temperature is not required, ordinary well or spring water.

No.	Capacity of Milk Receiver.	Size of Dairy.	Takes Care of.	Price.
2.	18 quarts	10 to 25 cows	3 milkers	\$ 7.25
3.	34 "	25 to 50 "	5 "	8.00
4.	52 "	50 to 100 "	8 "	10.00



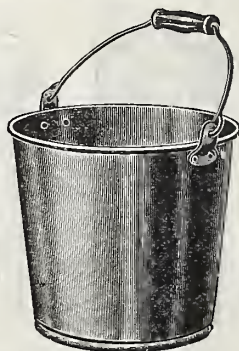
THE EUREKA SANITARY PAIL,

With Removable Strainer.

Strains rapidly and thoroughly.

Sediment does not collect on the strainer, but passes beyond and is removed when the strainer is taken out.

Price, 14 qt., \$2.25.



PLAIN MILK PAILS.

1X 10 qt.....	\$.75	2X 10 qt... ..	\$.90
1X 12 " .....	.80	2X 12 "	1.00
1X 14 " .....	.90	2X 14 "	1.10

THE NEW DOVER SANITARY MILK PAIL.

THE BEST MILKING PAIL ON THE MARKET.

Note the guard, which absolutely prevents dirt from falling from the rounded breast into the pail.

The body is in one piece, only has one seam, and the pail is made of extra heavy high grade charcoal tin plates. Every seam and crevice is smoothly soldered inside and outside, preventing dirt collection and making cleaning easy.

Many dairymen do not like to pour from a pail on the side which they milk in, on account of more or less dirt and dust which is apt to be on that side of the pail. Always pour from the Dover pail in the following manner: Have the pail opening face you; grip bottom of pail under said opening and pour over the top of the breast; the guard on the breast acts as a lip.

Price, \$2.00.

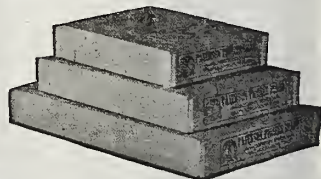
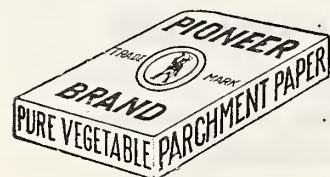


Pioneer Brand Parchment Butter Paper.

Guaranteed to contain no oil, grease, paraffine or wax.

Are you getting the best price for your butter? Try wrapping it in Pioneer Butter Paper, which completely protects it from all injurious odors, preserves the delicious flavor, and prevents the prints from becoming damaged in handling.

WE RECOMMEND—before you wrap butter, wet parchment thoroughly in clean, pure water, add salt if you prefer. It means better wrapping; it means better protection.



PRINTED PAPER in packages to comply with the law requiring the weight of the butter to be marked on the container. **SOLD IN PACKAGES OF 1,000 SHEETS ONLY.**

Price, package, 7 x 9 (1-2 pound size), \$1.50; 9 x 12 (1 pound size), \$2.15.

Price, plain paper, 25c. per pound.

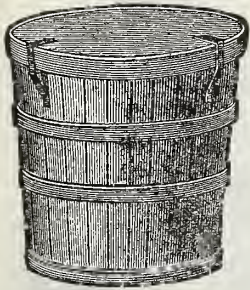
Write for quotations for large quantities and for printing special designs.

Prices subject to change without notice. (See note on inside first cover.)

Butter Tubs.

We are in a position to furnish superior spruce butter tubs, in any quantity desired. Tubs are kept in stock in 10, 20, 30 and 50 pound sizes, and shipments can be promptly made. Special prices for large quantities.

Write for quotations.

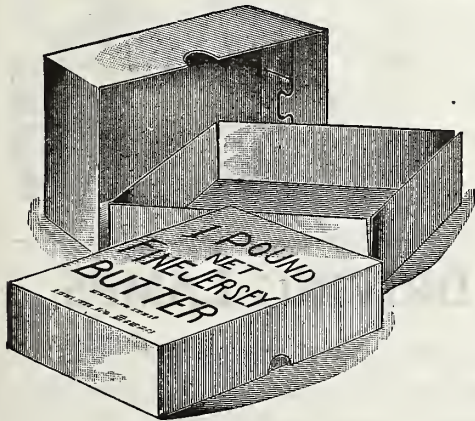
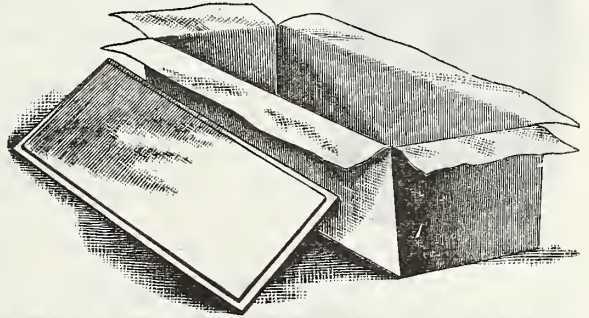


Improved Oblong Butter Box.

With Parchment Lining.

The box holds five pounds of packed butter, is nearly brick shaped, flaring so the butter will turn out, and is in the best possible shape to cut up for the table in square-like prints, and free from waste.

Price, \$1.35 per crate of 12 boxes.



ONE POUND

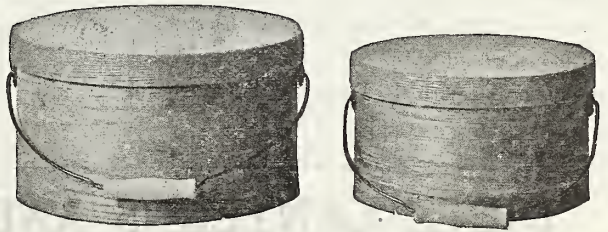
Folding Paraffined Paper Butter Boxes.

ODORLESS AND TASTELESS.

Price, \$1.15 per 100.

" \$10.00 per 1,000.

OAK BAIL BOXES.



Price, large, 65c.; small, 50c.

Butter Ladles,	15c.
Plain Butter Spades,	10c.
Creased Butter Spades,	10c.



Prices subject to change without notice. (See note on inside first cover.)

SMALL'S CALF FEEDER.

This is a device by which the calf may be fed away from its dam, and with any mixture of milk (or whatever else is healthful and desirable), with convenience and in the natural way, with that admixture of saliva which does not occur when calves drink from a pail.

Price, \$3.75. Extra nipples, 25c. each.



Rice's Weaner.

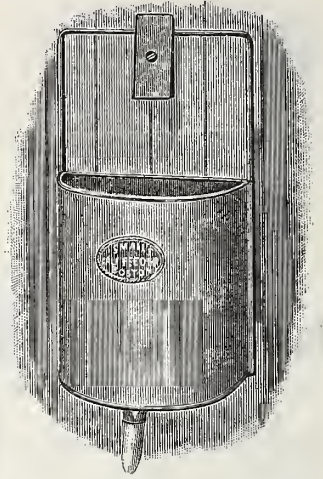
For preventing calves and cows sucking themselves or each other.

PRICE.

No. 1, for calves, **35c.**

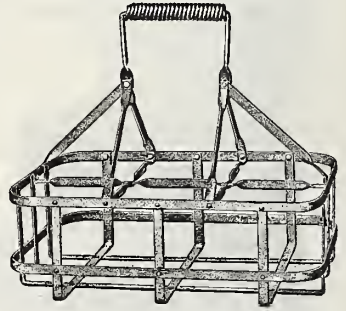
No. 2, for heifers, **60c.**

No. 3, for cows, **85c.**



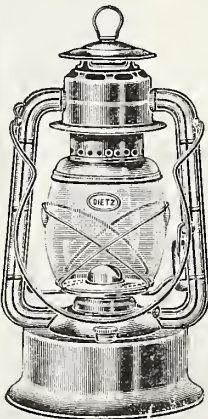
WIRE MILK BOTTLE CARRIERS.

2 quarts, round wire.....	\$.75
4 quarts, round wire.....	.85
6 quarts, round wire.....	1.15
8 quarts, round wire.....	1.35
6 quarts, flat wire.....	1.75
8 quarts, flat wire.....	2.25



DIETZ LANTERNS AND DRIVING LAMPS.

Neater, Trimmer, Better.
More convenient than any tubular lantern on the market.

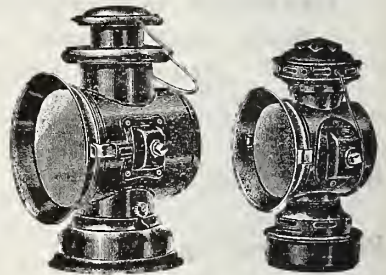


"Wizard" Lantern.

Can't spill oil, can't blow out.

Since Dietz introduced the original tubular lantern, nearly a half century ago, notwithstanding the fact that many inferior imitations have appeared, these manufacturers still enjoy the reputation of having the **largest output of lanterns of any concern in the world**, the goods holding their place by reason of their absolute merit, for they fill to perfection every requirement for which a lantern or lamp may be intended.

That it may not be forgotten that "Dietz" lanterns are "different" from a host of others, each lantern of the Dietz standard pattern will be tagged with a yellow quality tag bearing the Dietz trade-mark.

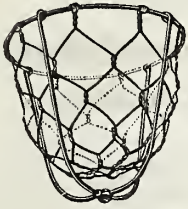


Driving Lamps.

We have in stock a full line of all the leading patterns. Prices furnished on application.

Prices subject to change without notice. (See note on inside first cover.)

OX MUZZLES.



Small, per pair, 35c.
Large, " " 55c.

COW BELLS.



No. 1, 65c.
No. 2, 55c.
No. 3, 45c.
No. 4, 35c.

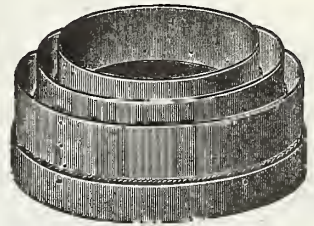
WOOD BOWLS.

OILED.



11 inch	.....	\$ .15
13 "	.....	.35
15 "	.....	.55
17 "	.....	1.10
19 "	.....	1.35

SIEVES



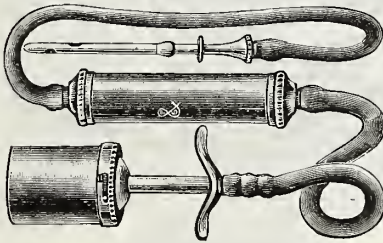
Wire Sieves, 12 inches	.....	30c.
" " 13 "	.....	35c.
" " 14 "	.....	45c.

MILK OR CREAM BOTTLE CASES.

The case is designed to put the bottle in when filled with milk for delivery.

Wood, with heavy wire bottom and partitions (not removable).

Quart case, holding 12 quart bottles,	.....	\$1.65
Pint case, holding 20 pint bottles,	.....	1.65



THE PILLING MILK FEVER OUTFIT. FOR STERILIZED AIR TREATMENT.

This Treatment Has Cured 97 per cent. of all Cases Treated.

Recommended by the Bureau of Animal Industry of the United States Government Department of Agriculture.

The outfit consists of the instrument, a roll of tape, a package of carbolized cotton, and full directions,

Price, \$3.50.

PILLING LEAD PROBE. WITH FULL DIRECTIONS.

For the treatment of obstructed teats, also for enlarging the opening.

Price, 30 cents.



PILLING TEAT EXPANDER.

For Hard Milking Cows.

Price, 50 cents.

PILLING HARD RUBBER TEAT PLUG.

Especially designed for two purposes: First, to prevent dropping of milk in cows where there is relaxation of the little muscle at the end of the teat and consequent leakage of milk; and secondly, to dilate the canal of the teat above the muscle in cases where hard milking is due to contraction of this part of the canal.

Price, 65 cents.



MILKING TUBES.



For drawing milk from cows with sore or obstructed teats. Made from white metal, in 2½ and 3½ inch lengths, heavily plated with pure silver and warranted equal to solid silver ones in every respect, at about one-fourth the cost.

Price, 25 cents.

Prices subject to change without notice. (See note on inside first cover.)

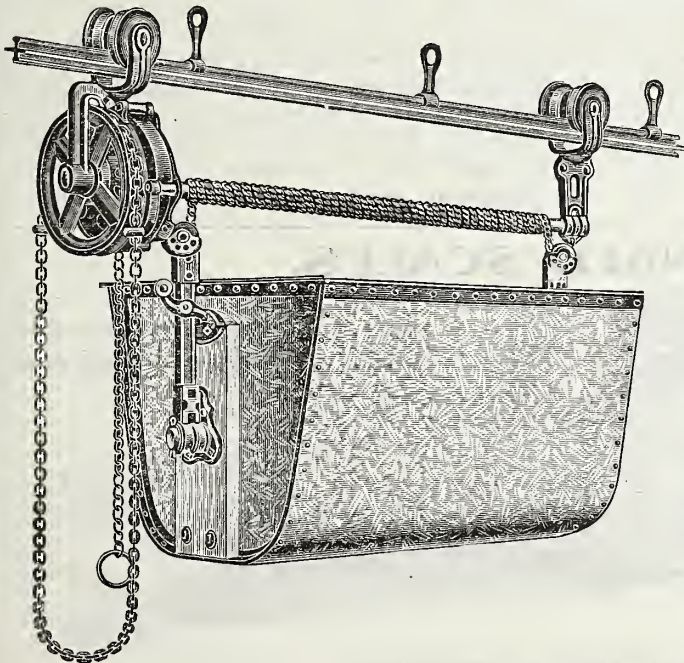
PORTER BARN EQUIPMENT.

The Cleanliness, Convenience and Comfort of Porter Equipment Will Swell Your Dairy Dividends.

The better care you give your cows, the better they will pay you. Stable them in light, clean, comfortable, sanitary quarters and they'll require less feed, keep freer from disease, produce more milk, with a higher percentage of butter fat, and your milk and butter will bring top-notch prices. These are **facts** proved over and over again in the experience of successful dairymen who are using Porter Litter Carriers, Feed Carriers, Stalls and Stanchions. Porter equipment in your barn will mean a big boost for extra profits, for it's built with practical, common sense understanding of the care the dairy cow needs for best results. It keeps the stalls clean, prevents waste of feed and manure—gives your cows the best chance to show what they can earn for you.



Expert Advice on Barn Plans and Equipment, Free for the Asking.

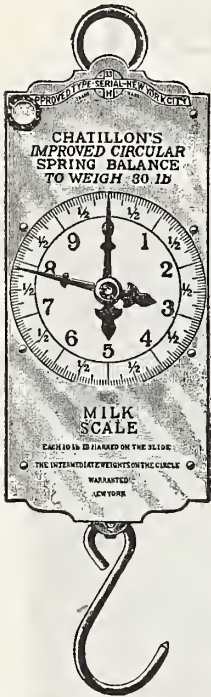


PORTER LITTER CARRIER.

With it one man can do the work of three, and do it better and easier. It is the handiest and most satisfactory litter carrier on the market. The chain hoist gives the biggest lift for the power and the quickest action. The hopper is made of heavy galvanized steel with capacity of 12 bushels; is held automatically at any height, and is provided with a dumping device, which is tipped at will by the man in the stable. Has one piece steel track, carrier wheels are roller bearing, and are swiveled so carrier will go around the sharpest curves safely. No end motion, no joggling, liquid litter will not slop over—the only litter carrier with a stationary arm.

Price on application.

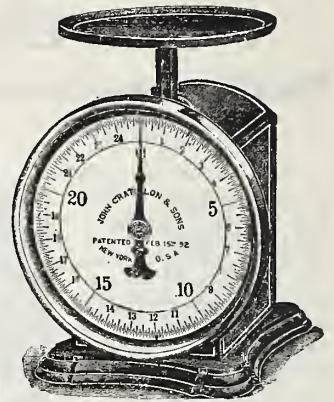
Prices subject to change without notice. (See note on inside first cover.)



IMPROVED CIRCULAR SPRING BALANCE MILK SCALES.

USED BY MOST DAIRYMEN.

Weighing up to 60 pounds, price,	\$3.75
" " " 30 " "	3.00



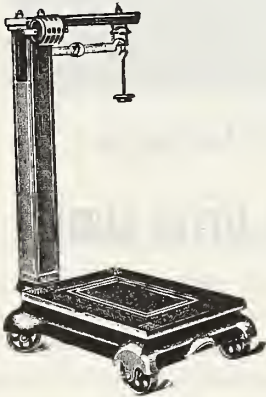
FAVORITE FAMILY SCALES.

Dial and Glass Sash, Handsomely Ornamented.

The pointer may be adjusted to balance the weight of a scoop, etc., by turning the thumb-screw on top of scale.

PRICE.

No. 047. Complete with scoop, white dial,	\$4.00
No. 147. " " " tin dial,	3.25



"CYCLO" BALL-BEARING SWIVEL WHEEL SCALES.

WEIGHING UP TO SIX HUNDRED POUNDS.

Are constructed with two swivel or caster wheels at the front or beam end of scale frame, combined with two stationary wheels at rear end of frame, which enables the operator to move the scale in any direction with the utmost ease.

The main frame platform and levers are made of smooth grey iron of ample weight and strength, all iron parts being finished in black Japan.

"Cyclo" Scales are fitted with hardened flexible lever bearing loops and platform bearing feet. The beam and crescent-shaped sliding poise are of solid brass, highly polished. All pivots are of best tool steel, carefully tempered and ground to a knife edge. Wood parts are of the choicest selection obtainable, well finished and handsomely striped in gilt.

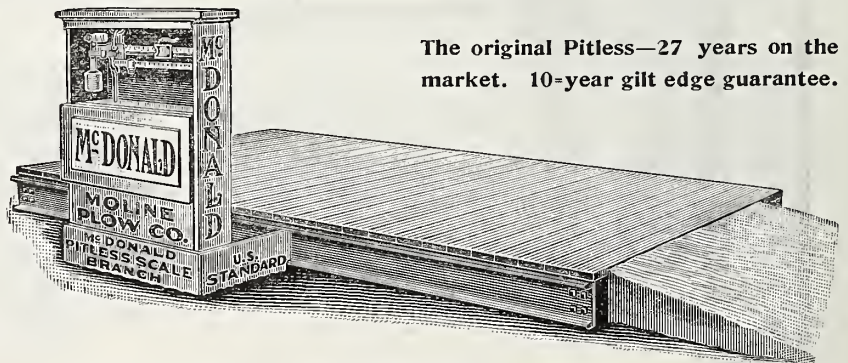
Prices on application.

McDONALD SCALES.

"McDonald Pitless" WAGON AND STOCK SCALES.

Steel Channel Frame.
Solid Steel Joists.

Compound
and
Tare Weight Beam.
Complete scale above ground.
Protected bearings—never
freezes.



The original Pitless—27 years on the market. 10-year gilt edge guarantee.

Prices, all sizes, on application.

Prices subject to change without notice. (See note on inside first cover.)

Special Attention is Called to Our

Stock of

..Insecticides..

Atomizers, Sprayers and Spray Pumps

————— INCLUDING —————

Bug Death, Dry Arsenate of Lead, Paste Arsenate of Lead, Paris Green, Lime-Sulphur, Tuber-Tonic, Aphine, "Black Leaf 40," Bordeaux Mixture, Hellebore, Tree Tanglefoot, Kerosene Emulsion, "Nico-fume" Liquid, Cut Worm Killer, Tobacco Dust, Weed Killer, Sheep Dip, and Cattle Oil.

New Misty, Midget, Rapid, Easy, Canteen and Acme Atomizers.

Champion and Acme Powder Guns. "Auto Sprays," "Kant Klog" and Perfection Hand Sprayers. Gould's "Pomona," Standard, Myer's Ideal, Deyo, and "Iron Age" Power Sprayers. Myer's No. 329 Sprayer (for White-washing), Gould's Cistern, Pitcher, and Force Pumps.

————— ALSO —————

Spray Pump Fittings, including Nozzles, Bamboo Extensions, Hose Couplings, Valves, Rods, Bushings, Packing, etc.

 **SEE OTHER SIDE** 

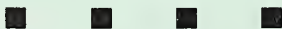
We Ask Your Careful Examination of the Following Complete and Up-to-Date Stock of

**Walking Plows, Sulky Plows, Disc Harrows,
Spring Tooth Harrows, Spike Tooth Harrows,
Hand Cultivators, Riding Cultivators, Wheel Hoes,
Seed Drills, Seed Sowers, Fertilizer Drills,
Fertilizer Sowers, Grain Drills, Weeders, Potato
Hoes, Hand Garden Cultivators, Manure Spread-
ers, Land Rollers, Corn Planters, Potato Planters,
Mowers, Rakes, Tedders, Corn Binders, Grain
Binders, Potato Diggers, Grain and Bean Thresh-
ers, Tractors, Gasoline Engines, Saw Machines,
Feed Mills, Corn Shellers, Ensilage Cutters, Feed
Cutters, Root Cutters, Fan Mills, Cider Mills, etc.,
also**

“EXTRAS”


FOR

***Cultivators, Seeders, Harrows, Plows, Grain and Fertilizer Drills,
Spreaders, Planters, Rollers, Mowers, Rakes, Tedders, Diggers,
Binders, Ensilage Cutters, Feed Mills, Threshers, Gasoline En-
gines, etc.***



CAREFUL ATTENTION GIVEN ALL ORDERS FOR MACHINE “EXTRAS.”

***IN ORDERING “EXTRAS” PLEASE CAREFULLY SPECIFY
MAKE OF MACHINE, AND NUMBER OR LETTER OF PART
WANTED.***

 **These lines we intend to have in stock at all times, and we
solicit your valued orders which we will endeavor to ship
promptly**

. . . WRITE FOR PRICES . . .

"BUG DEATH."

The multiplication of insect pests and increase of fungous diseases place the question of spraying outside the line of debate. *It must be resorted to. It is the only salvation of the fruit, vegetable or crop producer. Spraying is a necessity for successful cropping.* There is one insecticide on the market *absolutely harmless to animal life, which will kill the bugs and insects, protect the life of the leaves and plants, increase the yield, insure highest quality and promote the vigor of the plant or tree.*

Bug Death will do all this, for it is the only insecticide on the market which feeds and strengthens the leaves while destroying the pests which otherwise would destroy the crop, killing the potato, squash and cucumber bug, currant and tomato worm, and all other plant and vine-eating pests.



Reg. U. S. Pat. Off.

DIRECTIONS FOR SPRAYING ONE ACRE OF POTATOES.

Fill a pail holding about 12 quarts half full of water. Stir 15 to 25 pounds of Bug Death into this water. Fill sprayer tank nearly full with clear water, then pour Bug Death from bucket into tank and start machine at once, being sure that the agitator is working properly.

DIRECTIONS FOR SPRAYING ONE ACRE OF POTATOES WITH BUG DEATH AND BORDEAUX MIXTURE:

Dissolve 6 pounds copper sulphate (blue vitriol) in 6 gallons of water. Slack 6 pounds lump lime, slowly adding water as it slacks, being careful not to burn the lime. When thoroughly slacked strain it to remove any lumps before it goes into sprayer. When ready to spray, fill tank two-thirds full of clear water and add the 6 gallons of blue vitriol water. Next put in 15 to 25 pounds Bug Death (first mixing Bug Death in pail of water, same as under directions for using Bug Death alone). Fill tank almost full of clear water; lastly put in the lime water. Stir well and start machine at once, being sure that agitator is working properly.

The above solution, if properly applied, will prevent blight on potatoes, tomatoes, etc.

IF USED DRY

apply with Dickey Bug Death Duster or B-D Sifter at the rate of 15 to 25 pounds per acre, per application. Dust plant evenly and thoroughly. The more freely used the better the plant will thrive, as the increased yield and improved quality more than pays the expense. A perfectly sure, safe, effective insecticide.

1 pound package (is provided with a sifter top, making it easy to distribute contents on to plants or vines)..... \$.15
3 pound package40

5 pound package..... \$.55
12 1-2 pound package..... 1.35
100 pound keg 8.25



DICKEY BUG DEATH DUSTER.

Price, - - - 40c.

B-D Sifter.

Price, - - - 60c.



SWIFT'S PASTE ARSENATE OF LEAD.

One of the best known insecticides for leaf-eating insects, such as elm leaf beetle, gypsy and brown-tail moths, canker worm, codling moth, tent caterpillar and potato bug, as it adheres to the foliage for a long time.

On large trees the best results are obtained by a nozzle giving a fine, mist-like spray. Spray until the leaves commence to drip and then stop. Select a warm, dry day, so that the insecticide will have a chance to dry on the foliage.

Put up in the following sizes: 1 lb. pkg., 2 lb. pkg., 5 lb. pkg., 10 lb. keg, 25 lb. keg, 50 lb. keg, 100 lb. keg.

Price, all sizes, upon application.

Prices subject to change without notice. (See note on inside first cover.)

Keep in Step with the March of Progress.

PLANT MORE—HARVEST MORE—PROFIT MORE.

BETTER CROPS AND LARGER QUANTITIES MADE POSSIBLE BY USING

SHERWIN-WILLIAMS INSECTICIDES

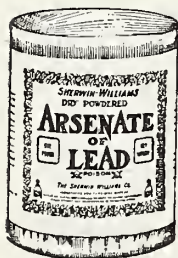
The Sherwin-Williams Co. has long been known to agriculturists and horticulturists as manufacturers of the best quality of insecticides on the market to-day. These goods are recognized as standards everywhere. When you are ready to spray, see us. We have spraying material for every use.

S-W DRY POWDERED ARSENATE OF CALCIUM.

Dry Powdered Arsenate of Calcium is similar in most respects to Arsenate of Lead and can be used for the same purposes with good results. It is especially recommended for potatoes and seed fruits, but due to its nature it is not recommended for stone fruits, such as peaches and plums. Recent government experiments would indicate that Arsenate of Calcium is going to be a very successful dust against the cotton boll weevil.

Arsenate of Calcium is cheaper in price than Arsenate of Lead and higher in arsenic content, and will save you considerable money. For general use from $\frac{1}{4}$ to 1 pound to 50 gallons of water, adding several pounds of good stone lime. For dry dusting mix with 8 to 10 parts gypsum or some similar carrier.

S-W DRY POWDERED ARSENATE OF LEAD.



Sherwin-Williams Dry Powdered Arsenate of Lead is one of the oldest and most reliable insecticides on the market, and can be used for spraying all character of fruits and vegetables with perfect safety. Sherwin-Williams Arsenate of Lead contains a maximum quantity of arsenic with a minimum quantity of free arsenic, insuring efficient control of insects with no danger of burning. Due to its light, fluffy character, Sherwin-Williams Arsenate of Lead will

cover more foliage and stay better in suspension in the spray tank than most leads on the market. Also due to its light, fluffy character it is splendidly adapted for dusting. For general spraying 1 to $1\frac{1}{2}$ pounds to 50 gallons of water will be found very effective.

S-W DRY POWDERED INSECTO.

Dry Powdered Insecto is a combination insecticide containing Bordeaux Mixture and Arsenate of Lead designed especially for the purpose of saving the grower the time necessary in making up separately his Bordeaux Mixture and Arsenate of Lead Mixture. The formula of Insecto is such that it is properly balanced and the grower will secure a spray equivalent in all respects to that which he would make up himself.

Insecto is especially recommended for fruit trees and general truck crops for the control of leaf-eating insects and various fungous diseases, such as blight, rust, wilt, etc. It should be used at the rate of 7 pounds to 50 gallons of water.

S-W DRY POWDERED TUBER-TONIC.

Tuber-Tonic is an insecticide designed especially for potatoes. It is a combination of Paris Green and Bordeaux Mixture, controlling both the potato bug and blight at one operation. Paris Green has long been known for its quick-killing powers, Bordeaux Mixture is the only fungicide that will control potato blight. Tuber-Tonic contains the adhesive qualities of Arsenate of Lead, making it an ideal spray for potatoes. It should be used at the rate of $7\frac{1}{2}$ pounds to 50 gallons of water.

S-W PARIS GREEN.



Sherwin-Williams Paris Green is one of the oldest and most reliable Paris Greens on the market. Its high quality is recognized throughout the world, and many years of use have proven its efficiency.

Sherwin-Williams Paris Green is very light and fluffy, insuring good suspension qualities and good adhesive qualities. It contains a maximum quantity of arsenic, which is the killing agent, but is so carefully combined that the danger of burning is reduced to a minimum. In the use of Paris Green conditions vary greatly, but for general purposes $\frac{1}{2}$ to 1 pound to 50 gallons of water would be found satisfactory.

S-W DRY LIME SULFUR.

Sherwin-Williams Dry Lime Sulfur is the only true Dry Lime Sulfur on the market. There are a number of substitutes, none of which are actual lime sulfur solutions in dry powdered form. In the manufacture of Sherwin-Williams Dry Lime Sulfur the standard solution is first made and the moisture then evaporated. It can be used for any of the purposes for which Liquid Lime Sulfur has been used in the past. A 100 pound drum will do the work of a 600 pound barrel of Liquid Lime Sulfur, thereby eliminating freight on 500 pounds. This is a big saving, and when you consider that it also eliminates the danger of freezing, leaking, etc., and reduces the cartage bill, there is no comparison. Dry Lime Sulfur can also be carried over from season to season without deterioration.

For dormant spraying use approximately 12 pounds to 50 gallons of water, and for summer spraying from $1\frac{1}{2}$ to 3 pounds to 50 gallons of water in combination with the usual proportions of Arsenate of Lead.

Prices quoted on complete line on application.

Prices subject to change without notice. (See note on inside first cover.)

"BLACK LEAF 40."

To Destroy Green and Rosy Apple Aphis, Woolly Aphis, Cabbage Aphis, Lice on Fruit Trees, Shrubs, and on Garden and Sweet Peas, and all Forms of Soft-Bodied Sucking Insects, without Injury to Foliage. Spray with

"BLACK LEAF 40," SULPHATE OF NICOTINE.

"Black Leaf 40" is highly recommended by experiment stations and spraying experts throughout the entire United States. Owing to the large dilution, neither foliage nor fruit is stained. Also "Black Leaf 40" is perfectly soluble in water—no clogging of nozzles.

Price: 10 lb. can, \$10.75 (makes 1,600 to 2,000 gallons for spraying tree lice, with the addition of 2% distillate oil emulsion; or 1,000 gallons for spraying green and woolly aphis, with the addition of three or four pounds of any good laundry soap to each 100 gallons of water); 2 lb. can, \$2.50; 1-2 lb. can, 75c.; 1 oz. package, 25c.

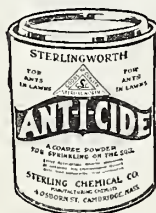
"NICO-FUME" (Liquid).

A highly refined tobacco extract containing 40% "free" nicotine. For **spraying**, 1½ teaspoonfuls to the gallon of water is effective against green aphis and thrips; and for **vaporizing**, 1½ oz. per 2,000 cubic feet furnishes a strong fumigation. "Nico-Fume" thus has the advantage of being used both for spraying and for fumigating.

Price, 1 lb. can, \$1.50; 1-4 lb. can. 50c.

STERLINGWORTH ANT-I-CIDE.

FOR USE AGAINST ANTS IN LAWNS.



They are a persistent pest. It is impossible to harbor them and have a good lawn. Either give up the lawn or the ants. If you prefer the lawn, try **Ant-i-cide**. It is a powder to be sprinkled on the ground. One pound covers about 200 square feet.

Price, 1 lb., 25 cents.

APHINE.

THE INSECTICIDE THAT KILLS PLANT LICE, THRIPS, ETC.

The Recognized Standard Insecticide.

Not a cure-all, but a specific remedy for sap-sucking insects infesting plant life, such as green, black or white fly, thrips, red spider, mealy bug and soft scales.

PRICE.

1-4 pint, 25c.; 1-2 pint, 40c.; 1 pint, 65c.; 1 quart, \$1.00; 1 gallon, \$2.50.

Sterlingworth Whale Oil Soap and Tobacco



Is compounded from whale oil, the efficiency of which is greatly increased by the addition of tobacco extractive matter. Is a most effective, reliable and cheap remedy for destroying San Jose scale, oyster shell scale, plant lice, and suck-

ing insects on trees, shrubs, plants, vines, rose bushes, etc.

Price, 1 lb. box, 25 cents.

STERLINGWORTH WEED KILLER.



Sterlingworth Weed Killer is a most satisfactory and powerful weed killer compounded especially for use on walks, drives, tennis courts, golf links, etc. It is a dry powder to be dissolved in water, and may be applied with an ordinary watering can. One gallon covers three to four square yards.

Price, 1 lb. package (makes 15 gals.), 50c.

Sulphur, Powdered.—Price, 10c. per lb.; 10 lb. pkg., 80c.

Tobacco Dust.—Price, 10c. per lb.; 5 lb. pkg., 30c.
Tobacco Stems.—Price, \$1.75 per 100 lbs.

Prices subject to change without notice. (See note on inside first cover.)

TREE TANGLEFOOT.

A safeguard for trees, against the gypsy moth, canker worm, and all climbing insect pests. It should be applied before the foliage appears, a continuous band two inches in width being put around the trunk of the trees three or four feet from the ground. One pound will make a band seven to nine feet long. Perfectly harmless to the trunk (unless where the trees are very young, and the bark thin and tender, in which case bind manila paper around the trunk before applying Tanglefoot) and remains sticky during hot, cold or wet weather.

Price: 1 lb. can, 50c.; 3 lb. can, \$1.45; 10 lb. can, \$4.50; 20 lb. can, \$8.75; 25 lb. can, \$10.50.

INSECT-BAN TREE TAPE.

PROTECTS FRUIT AND ORNAMENTAL TREES

From Caterpillars, Worms, Insects and all Crawling Pests.

A tape saturated with a powerful **Insect Repellent**. The shield protects the tape from the weather. No caterpillar, worm or insect can pass it. Not injurious to man, bird, animal or any lung breathing organism.

Shipped in rolls. The user cuts to suit and bands the Tree Trunk.

LASTS A SEASON—PROTECTS FOR A SEASON.

Price, 30 foot roll, \$1.50.



This is prepared exclusively for aphids or plant lice and spiders on house plants and vegetables. It is useful against most of the small sucking insects which infest house plants and greenhouse flowers. It is used by diluting one part of Killer in fifteen parts of water and may be applied by spraying or sprinkling.

Price, pint, 25 cents.

Sterlingworth Kerosene Emulsion.

A valuable remedy against scale, plant lice, etc.

PRICE.

Pint can, . . .	\$.25
Quart can, . . .	.40
Gallon can, . . .	1.00



STERLINGWORTH BORDEAUX MIXTURE.



Bordeaux Mixture is a preventive of potato blight, potato rot, mildew, leaf blight of shrubs and fruit trees, and, in fact, for all fungoid diseases. Apply as a fine spray to all parts of the plants liable to be affected.

PRICE.

Quart, 50c.; gallon, \$1.25; 5-gallon cans, \$5.50. In barrels of about 50 gallons, 75c. per gallon.

STERLINGWORTH HE-BO.

A SUBSTITUTE FOR POWDERED HELLEBORE.

Will be found satisfactory for use against rose slugs, currant worms, cabbage worms, and many other leaf-eating insects where a milder poison than Paris Green or Arsenate of Lead is desired. For many uses He-Bo is superior to much of the hellebore sold for killing insects.

Price, 1-2 lb., 18c.; 1 lb., 25c.



STERLINGWORTH ANTI CROW CORN OIL.

PROTECTS NEWLY PLANTED CORN FROM CROWS.

Dip a stick into a can of **Sterlingworth Anti Crow Corn Oil** and stir it around in a peck of corn until the corn is darkened a little. Then expose it to the sun until dry, so it will run through a seeder, or you can mix a gallon of **Sterlingworth Anti Crow Corn Oil** with two gallons of hot water and add the corn while stirring. The oil will give it a thin crow-protecting coat, which is the easiest and cheapest way of protecting your newly planted corn from crows and blackbirds. Price, pint, 25 cents.



STERLINGWORTH CUTWORM KILLER.

A preparation which is quick and sure in effect on worms and non-poisonous to animals. Dead cutworms may be seen wherever there are cutworms and Sterlingworth Cutworm Killer has been used. To protect plants in hills, sprinkle a small quantity of Killer around the plant. When in rows, sprinkle both sides of row.

One pound is sufficient for 175 plants when in hills, and 150 linear feet of plants when in rows.

1 lb. sprinkler-top boxes, 25c.



STERLINGWORTH SHEEP DIP.

A highly concentrated, non-poisonous liquid for sheep-washing purposes, killing ticks and lice, curing scab and promoting the growth of wool and flesh. Used also for cattle, horses, pigs, fowls, dogs, etc. A protector of sown seed from birds, slugs and "smut." Does not require heating nor any preparation—simply add cold water and it is ready for use. Easily applied and always effective.

Price: 1 qt. can, 60c.; 2 qt. can, 90c. per gallon, \$1.60.



Prices subject to change without notice. (See note on inside first cover.)

PROTECTS
STOCK FROM
FLIES.

GUARANTEED CATTLE OIL

READ THIS GUARANTEE.

Buy a can of Guaranteed Cattle Oil. Use it as directed and if it does not protect your cattle and horses from flies and mosquitoes to your satisfaction, you to be the judge of what constitutes satisfaction, return the empty can to the dealer from whom you made the purchase and he will return to you the purchase price. We leave the matter of what constitutes satisfaction entirely to your honor. All we ask is that you use it as directed, give it a good, honest, fair trial and treat us as you would wish to be treated if our positions were reversed.

This is the fifth season we have sold **Guaranteed Cattle Oil**. During the season just closed we have sold more of it than of all other fly oils combined and it has given universal satisfaction. We did not receive a complaint from what we sold in 1918, although the above guarantee was plainly printed on every can.

We believe **Guaranteed Cattle Oil** to be the most lasting and satisfactory fly repellent for use on cattle and horses that was ever offered. It is also, to some extent, useful against lice on cattle, but we recommend Sterlingworth Lice Powder for lice on young stock, cattle and horses.

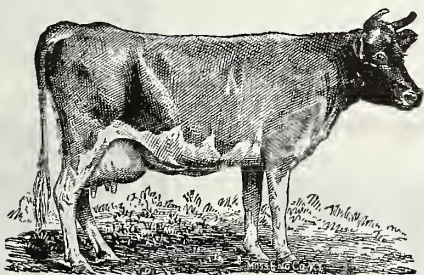
Flies hit by **Guaranteed Cattle Oil** are killed. Others are kept off by odor arising from it. It may be applied with ordinary hand sprayer. A small quantity covers a large surface. It is very economical to use.

Remember every can is guaranteed to give satisfaction or price is refunded without quibble or question. We carry large stocks and are prepared to supply dealers promptly.

Prices: 1 qt. cans, 35c. each; 1 gal. cans, \$1.10 each.



EUREKA FLY KILLER.



Will protect horses and cattle from the annoyance of flies, insects and vermin of all kinds. A much greater flow of milk obtained from cows kept free from the torment of flies.

As a disinfectant it will keep animals healthy.

Applied to the walls and ceilings of stables, where there are myriads of flies, they leave instantly.

Apply with any of our atomizers or sprayers.

Price, per gallon, \$1.10.

SHERWIN-WILLIAMS FLY-SPRAY.

Keeps Flies off Cattle and Horses.



Will protect horses and cattle from annoyance of flies, lice, tick and other vermin.

Fly-Spray increases milk yield and will not gum the hair. It is also effective for use in poultry houses.

Fly-Spray is absolutely harmless and application should be made as often as necessary.

Put up in one and five-gallon cans and barrels.

Price, \$1.15 per gallon.



A most efficient spray to protect cattle and horses from flies. Antiseptic and non-poisonous. Used in hen houses to kill lice.

Flies breed in manure heaps and go from place to place carrying disease germs along with them. Flies are responsible for many of the epidemics that appear among people and animals.

If their breeding places are regularly sprayed with **creonoid**, they cannot breed and the number around the buildings will be greatly diminished.

Price, gallon, \$1.10.



Prices subject to change without notice. (See note on inside first cover.)

SPRAYERS AND POWDER GUNS.

For Spraying all Insecticides on Potato Vines, Shrubs, Small Trees, House Plants, Live Stock and Poultry.

A great Labor Saver on the Farm and in Every Garden, Barn, Greenhouse, Orchard and Hennerly.

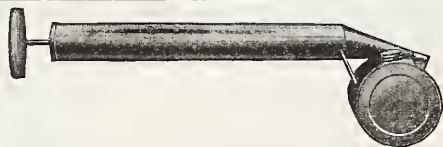
Will apply the finest possible spray on any object desired, and exterminate any kind of insect life.



"New Misty" (Tin), 50c.

Quart size sprayer made of selected stock and carefully tested before packing. The method of construction with the pump passing through the top of the can keeps the air nozzle and spray tube in a straight line, and adds to the strength of the entire sprayer.

Pump is $1\frac{3}{4}$ inches in diameter, 14 inches long; tank is 4 inches in diameter, $4\frac{1}{2}$ inches long. All seams locked and soldered.



No. 22. "Auto-Spray" (Tin), 50c.

Made of heavy tin, well and carefully put together. Can holds one and one-half pints.

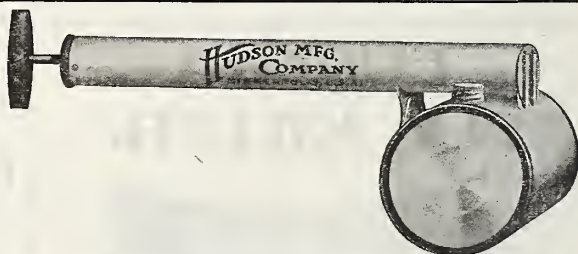


"Midget" (Tin), 35c.

A size made to fill the need for small sprayer for household requirements.

Double tube sprayer, throwing a wide, fan-shaped spray; has proven a popular favorite for using fly oils and in general garden use.

Pump, $1\frac{3}{4}$ inches in diameter, 14 inches long; tank, 4 inches in diameter, $4\frac{1}{2}$ inches long. Galvanized or brass. Holds one quart. Carefully tested double tubes. Length over all, nineteen inches.

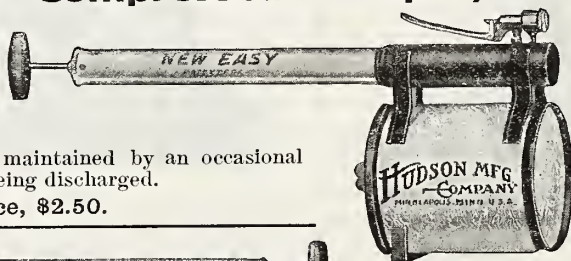


"Rapid" (Galvanized Iron), 60c.

The "Easy" Compressed Air Sprayer

Made of heavy galvanized steel throughout, with sufficient capacity for one gallon of liquid. Has a powerful pump with which pressure can be maintained by an occasional stroke as the liquid is being discharged.

Price, \$2.50.



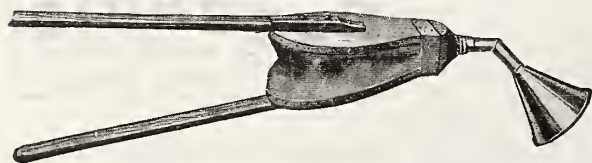
Weights only one pound, holds one and one-half pints.

Well and simply made of heavy tin, combined into the strongest possible shape, and cannot come apart.



"Acme" (Tin), 50c.

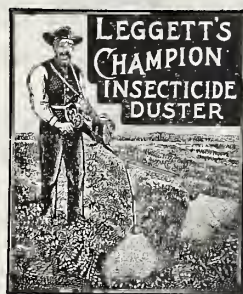
"CANTEEN" (Brass), \$1.50.



"Acme" Powder Gun, \$1.35.

and well finished throughout, making a neat, attractive and serviceable implement.

Prices subject to change without notice. (See note on inside first cover).



LEGGETT'S CHAMPION
DRY POWDER GUN.

Will cover two rows of potatoes at once, as fast as a man walks. Adjustable to any width of row. Distributes Paris Green, hellebore, sulphur, lime, "fungiroid," tobacco dust, etc.

Price, \$13.00.

DIRECT CONNECTED PUMPING OUTFIT. SELF CONTAINED GASOLINE ENGINE AND GOULDS PYRAMID DOUBLE-ACTING PUMP.

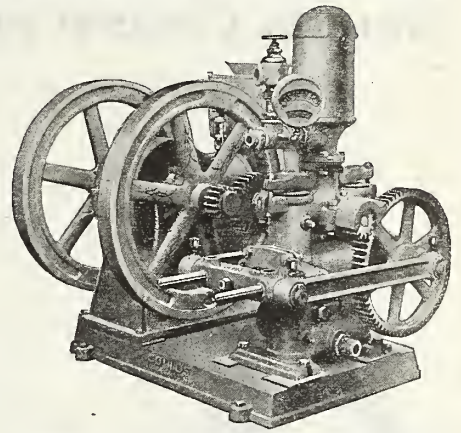
NO VIBRATION AND PERFECT ALIGNMENT AT ALL TIMES.

Table of Various Combinations.

Engine Horse Power.	Pump Diameter.	Pump Stroke.	Gallons Per Minute.	Suction Inches.	Discharge Inches.
1½ to 3½	3	5	8 to 15	1½	1½
2 to 3½	4	5	15 to 30	2	2
2½ to 3½	5	5	25 to 35	2½	2½
3½ to 6½	6	6	50 to 70	3	3
6½ to 9	6	12	100 to 140	4	4

The power required for these outfits depends upon the capacity and pressure desired.

Price on application.



ENGINE AND PUMP ON CAST IRON BASE.

GOULDS HAND FORCE PUMPS.

When large quantities of water must be pumped, as for watering cattle, etc., a pump such as the Goulds "Lift" Pump is used. This pump is made to deliver large quantities of water and is built extra strong.

When it is necessary to force the water to a higher level than the spout or to have it delivered with considerable force for washing wagons, sprinkling the garden, etc., it is necessary to use a force pump such as Goulds "Star" Force Pump.

When a constant even stream is desired, one of Goulds Double-Acting "Empire" Pumps is used. This pump has two cylinders and delivers water on both the up and down strokes, giving a steady flow at the spout.

For deep well service the pumps are similar to those shown except that the cylinder is lowered within fifteen feet or less of the water and preferably below the water level. Heavier construction is also used when the pumps operate over very deep wells.

Goulds "New Alert" Double-Acting Force Pump, for forcing water into a tank. This pump will lift and force the water one hundred to one hundred and fifty feet above the level of the supply. The lever is long and in a vertical position, making it easy to operate the pump.



"Star" Force Pump.
Anti-Freezing.
Fig. No. 1153.



"New Alert" Double-Acting Air
and Water Force Pump.
Fig. No. 1334.



"Lift" Pump.
Star Lift.
Fig. No. 1018.



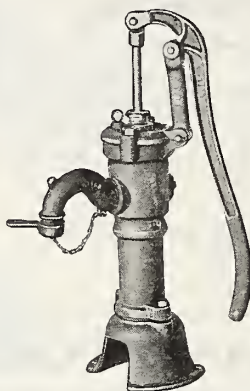
"Empire" Double-
Acting Force Pump.
Fig. No. 1362.

Prices subject to change without notice. (See note on inside first cover.)

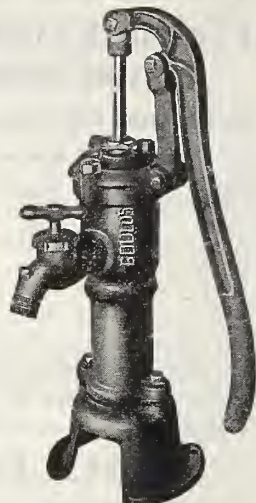
Goulds Cistern and Pitcher Spout Pumps.



"Boston" House Force Pump.
Fig. No. 1523.



"Universe" Iron Cylinder House Pump.
Fig. No. 1168.



"Universe" Iron House Pump.
Fig. No. 1169.

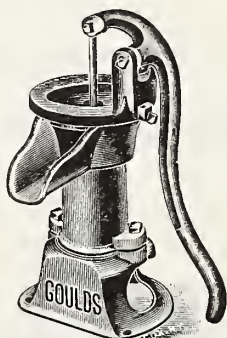
Fig. No. 1523. This pump meets the demand for a medium-priced force pump with large air chamber capacity for supplying water in residences, or for outdoor use over driven wells. Can be arranged for supplying water either from the spout or from opening at the back for piping to cistern or storage tank in the attic. Plunger rod is of polished steel. It operates through a brass packing gland and is guided by both the bearer top and stuffing box. Pumps with brass-lined cylinders have galvanized plungers and valves. All "Boston" brass-lined pumps are fitted with brass-bushed suction valve seat.

Fig. No. 1168. "Universe" Hand Force Pump, fitted with syphon spout, which is provided with a cap and chain. By screwing cap to the spout, water may be discharged through back outlet of pump. This is an easy working, compact and substantial pump. It is well adapted for house pumping, furnishing water either at the spout or through opening at back to storage tank, also for outdoor use over driven wells. The bearer top is secured with hook bolts, and can be turned to any desired angle. The plunger rod is brass cased, and the stuffing box is brass.

Fig. No. 1169. "Universe" Hand Force Pump, similar to No. 1168, but fitted with a cock spout.



Closed Spout Pitcher Pump.
Iron or Brass Lined. Fig. No. 209.



Pitcher Spout Pump.
Fig. No. 205 1-2.

Fig. No. 209. This pump is a special design for service with driven wells where the ordinary pump would not work satisfactorily. It is fitted with a vacuum chamber in the base, as shown by the sectional view.

Fig. No. 205 1-2. Standard closed top Pitcher Spout Pump. A low-priced, substantial pump for use over cisterns or shallow wells. The bearer top is secured to the cylinder with a set screw. A nut tapped for iron pipe is supplied on the threaded hub beneath the "G" base.

The Goulds Pumps, as shown on these two pages, comprise a special assortment selected to meet the demands of a very large per cent. of every-day requirements.

When in need of a pump do not fail to write us for quotations.



No. 524.

GOULDS Brass Jacket Drive Well Points.

These well points are made of galvanized iron pipe with elliptical holes punched of uniform size an equal distance apart. They contain the greatest number of holes possible to punch in a pipe and retain sufficient strength for driving. They are covered with a brass wire cloth which is protected by a heavy perforated brass jacket. The drive point is iron, swaged into the pipe and riveted.

Write for quotations.



No. 661.

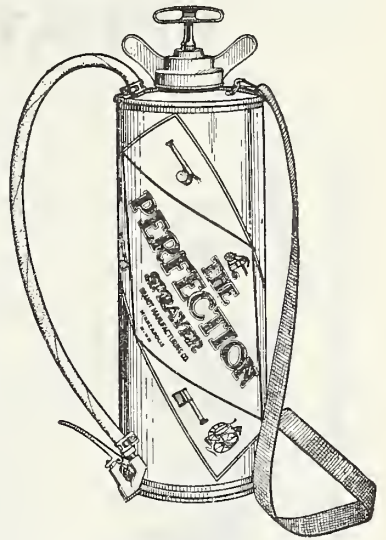
Prices subject to change without notice. (See note on inside first cover.)

"PERFECTION" SPRAYER.

Built on the best lines, of high-grade material and with the idea of producing a sprayer which has none of the faults and defects so common in many Knapsack sprayers heretofore on the market.

The tanks are made of heavier metal than has ever been used in sprayers of this kind, are lock seamed at the corners to convex heads of metal two gauges heavier than the sides, a single seam runs lengthwise of the tank. This seam is reinforced by rivets, making the tank practically unbreakable. The pump is $1\frac{1}{4}$ inch seamless brass tubing with a brass valve, and is sealed into the top of the tank with heavy threads, following the construction used in the best makes of fire extinguishers. The pump rod is 5-16 inch and is fitted with leather and special metal expanders.

The hose is attached to the sprayer at an angle, so that it will not kink and become cracked and broken. The shoulder strap is attached with snaps and can be quickly and easily removed. The hose is $\frac{3}{8}$ -inch 5-ply cloth inserted and is equipped with automatic shut-off nozzle.



These sprayers are made of **galvanized steel** or **brass** as ordered. Weight, 9 lbs. empty. All sprayers tested to 60 lbs. before leaving factory.

Price on application.



"KANT-KLOG."

Sprayer body is made of heavy polished brass or galvanized steel, as desired. Top and bottom are dome shaped, joined to body under heavy pressure, making a complete double seam. The body is supported and further strengthened by a heavy steel band around the bottom.

Style G, with **galvanized steel** or **polished brass** body, as ordered, brass air pump, hose, escape valve, "Kant-Klog" nozzle, spring shut-off and carrier strap.

*Price
on
application.*

Auto-Spray No. 1.

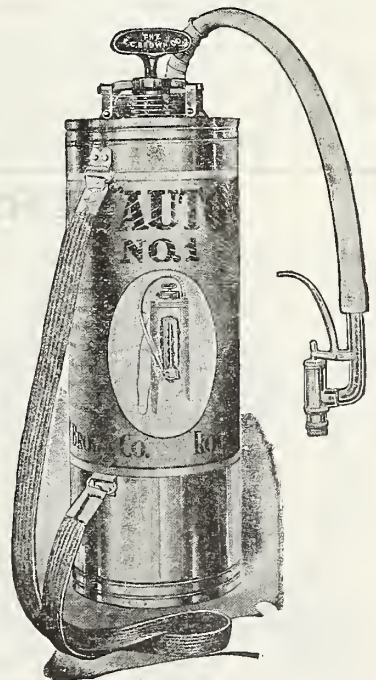
COMPRESSED AIR SPRAYER.

The strongest and most simple in its working parts of any compressed air sprayer. Two pumpings of about fifteen strokes on the plunger will discharge the contents under high and constant pressure. After pumping, the operator has nothing to do but direct the spray. Sprayer is equipped with patented **non-clogging** nozzle.

This sprayer consists of a solution tank holding four gallons, made of galvanized steel or heavy sheet brass, as ordered, and a brass air pump, the cylinder of which is made of seamless tubing, located inside of the solution tank, protected from injury, and provided with cam locking device, which closes the filler opening air tight with a half turn of the pump handle.

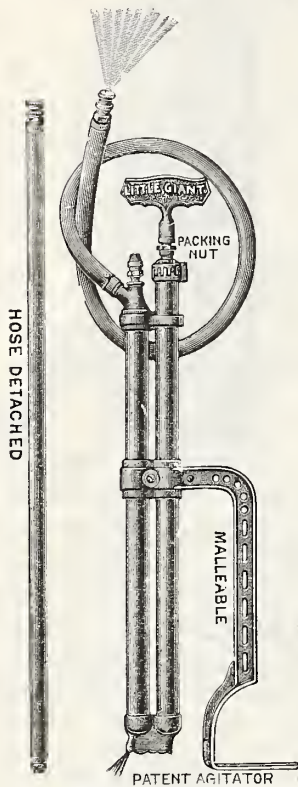
The entire machine is made without screws or bolts, and no tools of any kind are required to take it apart.

Price on application.



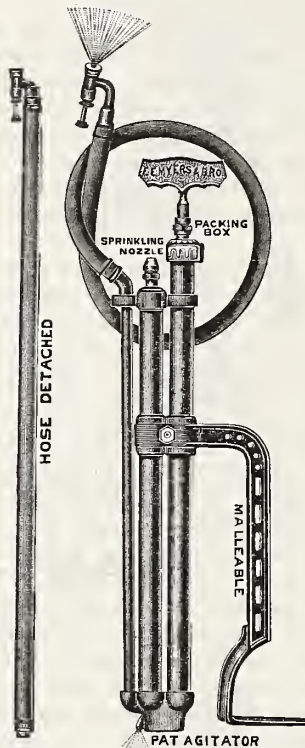
Prices subject to change without notice. (See note on inside first cover.)

SPRAY PUMPS—Continued.

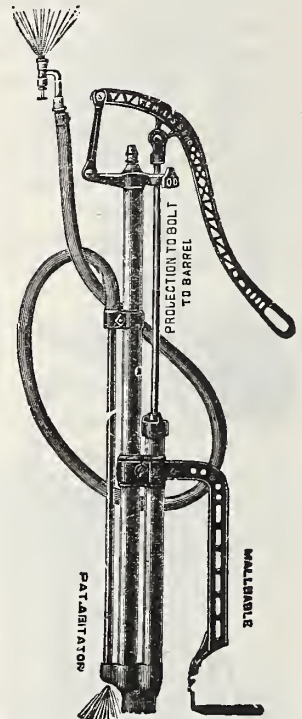


BRASS BALL VALVES

No. 327 1-2.



No. 325.



No. 324.

No. 327 1-2. Myers Little Giant Brass Spray Pump, with agitator, complete with hose and Imperial combination fine and coarse spray and solid stream nozzle.

No. 325. Myers Imperial Brass Spray Pump, with agitator, complete with hose and graduating Vermorel fine and coarse spray and solid stream nozzle and malleable foot rest.

No. 324. Myers Lever Brass Spray Pump, with agitator, complete with hose and graduating Vermorel fine and coarse spray and solid stream nozzle. **Price on application.**

With Bordeaux nozzle for spraying whitewash, \$1.00 additional.

MYERS SPRAY OUTFIT.

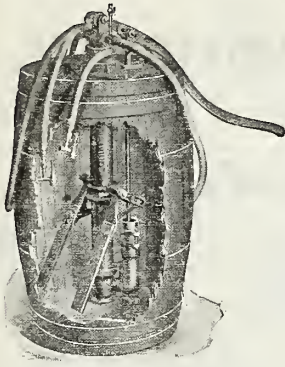
This outfit is light, compact and easy to operate. The tank holds fifteen gallons, is mounted so that the liquid will not slop or spill, and in a way that makes it easy to handle. The pump spreads across the top of the tank and is held firmly in place by a thumb nut. It has the largest air chamber of any spray pump of corresponding size. This enables the operator to keep a uniform pressure at the nozzle.

The pump barrel is $1\frac{3}{4}$ inches in diameter, 7 inches in length. The plunger is made of brass and is self-oiling. The packing is cotton wick, which will resist the action of the chemicals used for spraying and can be tightened without removing from the pump. The valves are bronze balls $\frac{5}{8}$ of an inch in diameter, which allows free passage of the liquids and prevents clogging. Both valves are removable. The pump handle is of iron. It is extra long and a pressure of one hundred and fifty pounds can be easily maintained.

A mechanical agitator keeps the liquids well stirred. A fine strainer at the opening in the suction pipe prevents anything getting into the working parts of the pump. The pump has the following equipment: 10 feet $\frac{3}{8}$ -inch pressure hose; 1 nozzle; 8 feet pipe extension, in two pieces; 1 brass shut-off cock. **Price on application.**



Prices subject to change without notice. (See note on inside first cover.)



Goulds "Pomona" Barrel Pump,

NO. 1100.

Outside Packed Plungers. No Leather Packings.

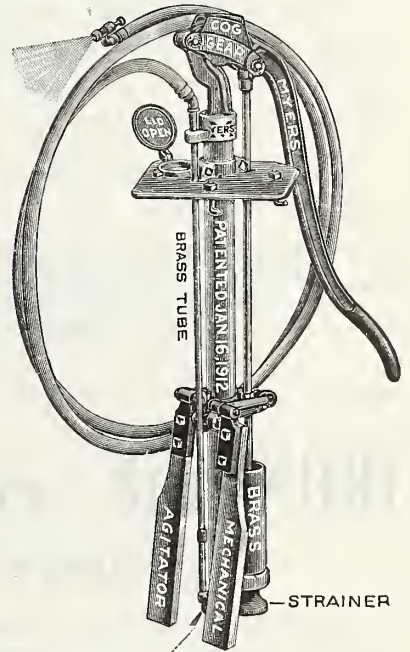
Is unusually powerful, fully capable of supplying two leads of hose, 15 feet each, and two angle nozzles. The working parts, including the plunger, plunger connection, gland, valve, valve seats and strainer, are of solid bronze. They are simple, accessible and easily removed. It is equipped with a long adjustable lever, producing three, four or five inch strokes by simply removing and replacing a single bolt, thus varying the pump's capacity. The pump may be placed in any length barrel, as the barrel plate is adjustable. It is held firmly in place by this plate and a small anchor at the bottom of the barrel. The agitator is simple, but very effective, operated by the same lever that works the sprayer.

Price on application.

MYERS SPRAY PUMPS.

No. R318B. A spray pump of a construction that is the very best in all its parts, being self-contained and ready for operation, when bolted to the barrel. Has bronze ball valves and brass seats; the plunger, cylinder and discharge pipe are all brass.

No. 329. Whitewash, Cold Water Painting Machine and General Purpose Sprayer, with patent double agitator, a most complete and serviceable outfit. The tank is made of heavy galvanized iron with a wide bottom, so as to set steady in operation. The cover is removable, is held securely in place by two end bolts with thumb nut, one on each side, which hold the cover tight and prevent any spilling or splashing of the liquid. Holds 7 gallons and is fitted with Bordeaux nozzle, brass ball valves, and has both jet and dasher agitator.

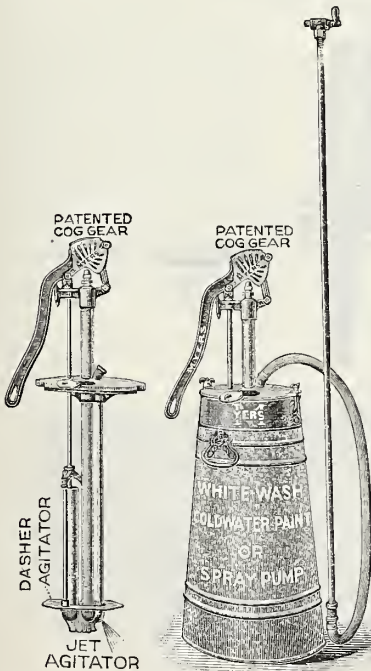


PAT JET-AGITATOR
No. R318B.

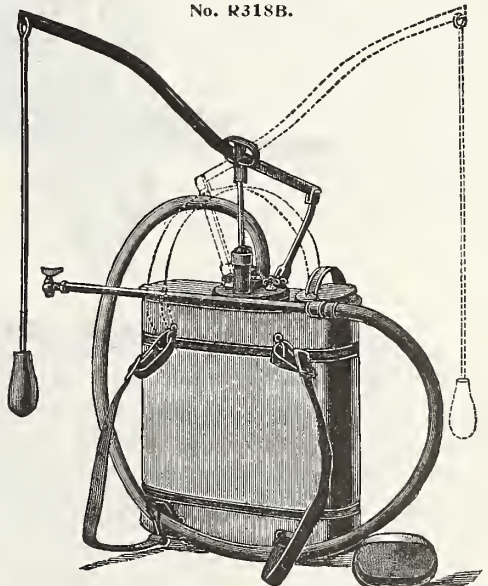
No. 330. Myers Knapack Spray Pump, made with galvanized iron tank, and fitted with 5 feet of $\frac{1}{2}$ -inch hose, pipe extension and Bordeaux or graduating Vermorel spray nozzle, which can be graduated from a fine mist spray to a solid stream, or shut off entirely.

No. 331. Myers Perfect Knapack Spray Pump, made with **Copper Tank**. Complete with hose, stop-cock, pipe extension and Bordeaux or graduating Vermorel nozzle.

Price on application.



No. 329.



Myers Knapack Spray Pump.

Prices subject to change without notice. (See note on inside first cover.)

THE MYERS, DOUBLE ACTING COG GEAR, COMPLETE SPRAY PUMP OUTFIT, NO. R316B.

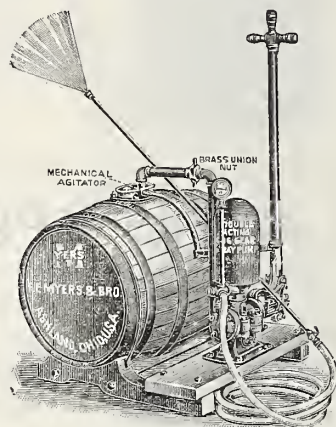
Mounted on Skids with 50 Gallon Barrel and Mechanical Agitator.

With brass valves and ground bevel brass seats, 2-inch seamless brass removable cylinder, hemp packed plunger.

SPECIAL FEATURES: Cog gear movement, increased leverage adapted for spraying under heavy pressure, mounted complete, occupying smallest possible space. Capacity sufficient for eight nozzles; well adapted for spraying potatoes.

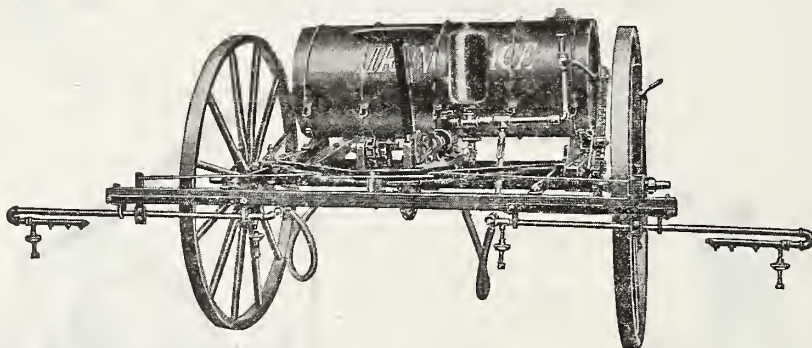
Pump complete, 50 gallon barrel mounted on skids, with pressure gauge, one 15-foot lead, ½-inch, 7-ply discharge hose, one Fembro nozzle, one 8-foot pipe extension with lever shut-off and mechanical agitator.

Price on application.



IRON AGE FOUR-ROW SPRAYER.

ASK FOR SPRAY BOOKLET.



IRON AGE TRACTION SPRAYER.

For potatoes and other row crops. Made in four rows, with 55 gallon wood tanks, wood wheels, double acting pumps, thorough mixing of solutions, large air chamber, bronze ball valves, hemp packing—all easily gotten at—relief valve to regulate the pressure, center drive by chain, pressed brass nozzles and nozzle strainers with every outfit. Spraying not only insures your crop against blight, and kills the bugs in a hurry, but every spraying actually improves the healthy condition of your plants and so increases the yield per acre.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

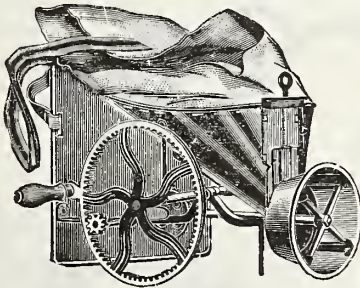


THE CAHOON BROADCAST SEED SOWER.

For Sowing Wheat,
Oats, Barley, Rye,
Buckwheat, Grass
Seed, etc.

This hand machine sows from four to eight acres per hour, at a common walking gait.

Price, \$3.50.



Foster (Racine) Broadcast Seeder. (DOUBLE GEAR.)

Will sow perfectly any quantity to the acre of oats, barley, rye, buckwheat, clover, millet, timothy, Hungarian, etc. Will also sow peas, corn and fertilizers in a most satisfactory manner.

Price, \$9.00.

CYCLONE BROADCAST SEED SOWER.



This seeder is practical, neat and mechanically correct in construction. It distributes seeds evenly, has an automatic cut-off, and the iron distributing wheel gives great momentum. No machine does better work, it being a strictly high grade seeder.

Price, \$1.50.

"NEVER MIND THE WIND—SOW ANY TIME." THOMPSON GRASS SEEDER.

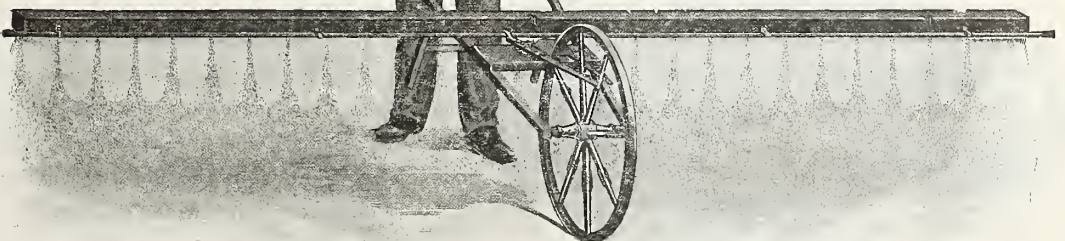
This is really the greatest grass seeder made to-day. Not a toy, but a strong and durable implement specially designed and adapted to its use. It's easy—it only weighs 45 pounds. Does not throw the seed into the wind. Puts it on the ground lightly and evenly where it belongs, insuring the operator a good even catch. Strong and durable. We know of Thompson Seeders which have been in use 30 years which are thoroughly good and effective to-day.

THE "ORIGINAL" WHEELBARROW.
14 and 16 feet.
Price on application.



WHEELBARROW SEEDERS

are a most valuable implement for sowing all grass seeds broadcast. The quantity of seeds sown per acre is accurately governed by the wheel, which moves correspondingly slow or fast as the machine is run over the ground. For all sections where winds prevail, there is no machine made that will equal this implement for an even, accurate job of seeding. The quantity required per acre can be instantly changed by slipping a pin from one hole to another. These seeders run light and are not complicated. Seeds can be sown mixed or separate and in any quantity desired.

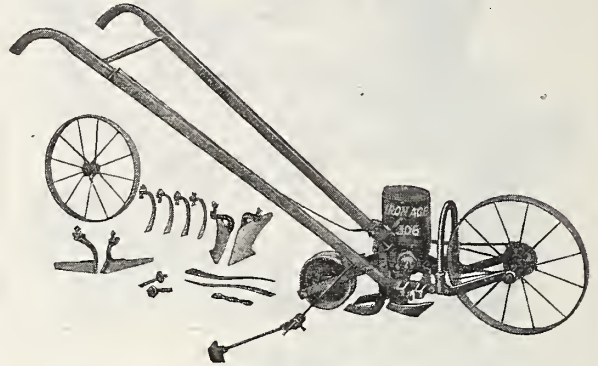


Prices subject to change without notice. (See note on inside first cover.)

IRON AGE GARDEN IMPLEMENTS.

No. 306. Iron Age Combined Double and Single Wheel Hoe, Hill and Drill Seeder.

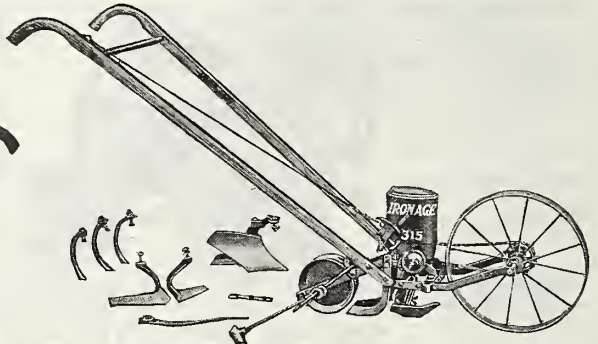
Ten tools in one, and each as satisfactory as a tool made for the special purpose. Places the seed in continuous rows or in hills, 4, 6, 8, 12 or 24 inches apart. Can be quickly changed to a double or single wheel hoe, cultivator or plow.



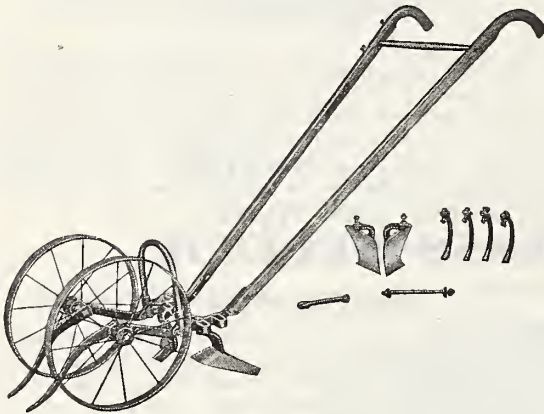
No. 306.

No. 315. Iron Age Combined Single Wheel Hoe, Hill and Drill Seeder.

Identically the same as No. 306, excepting it has only the single wheel.



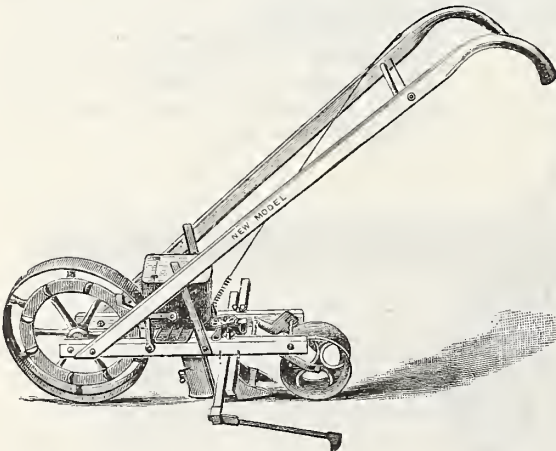
No. 315.



No. 301.

No. 301. Iron Age Double and Single Wheel Hoe.

Can be quickly changed to a double or single wheel hoe, cultivator or plow. As a double wheel can be used astride the row, or as a single wheel between the rows. A drill seeder or hill and drill seeder attachment can be added at any time.



New Model Seed Drill.

New Model Seed Drill.

This drill has been in use many years, and is well known to give perfect satisfaction. It has a large, broad-tired wheel, perfect and reliable index, a cut-off to stop the flow of seed when desired, and is very valuable and complete.

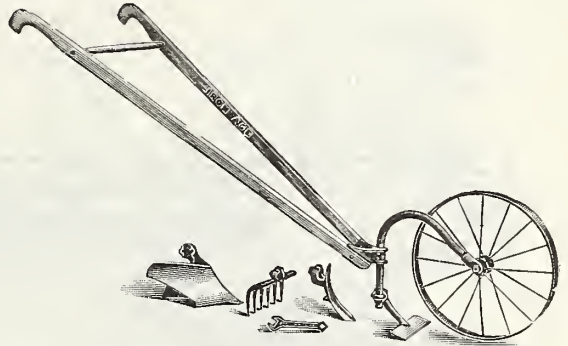
Price on application.

Prices subject to change without notice. (See note on inside first cover.)

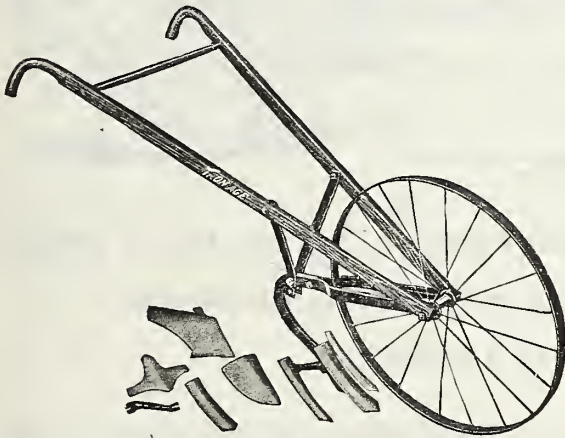
IRON AGE GARDEN IMPLEMENTS—Continued.

No. 12. Iron Age Wheel Plow and Cultivator.

Remarkable for its exceeding lightness, combined with great strength, the low price and variety of work it will accomplish. Will do all the work of a kitchen garden, as plowing, hoeing, raking and cultivating, and is especially suitable for those desiring such a variety of tools for a small amount.



No. 12.



No. 19C.

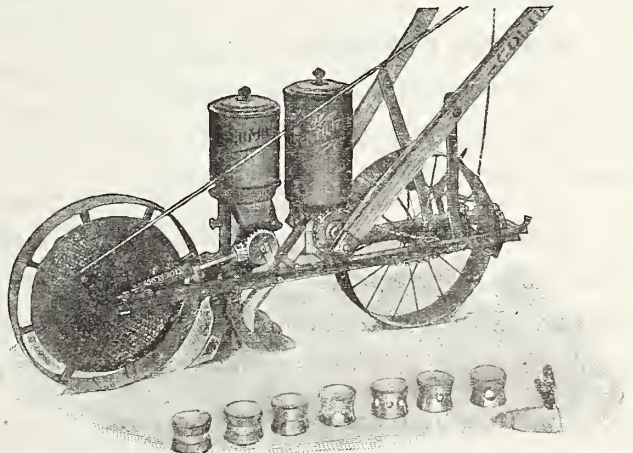
No. 19C. Iron Age Wheel Plow and Cultivator.

Has a higher wheel than any previously offered, it being 24 inches high, with 1-inch tires and very strongly made. The frame is steel throughout, which insures durability and lightness.

Price on these machines and on the full Iron Age line on application.

THE NEW COLUMBIA GARDEN SEEDER. WITH FERTILIZER ATTACHMENT.

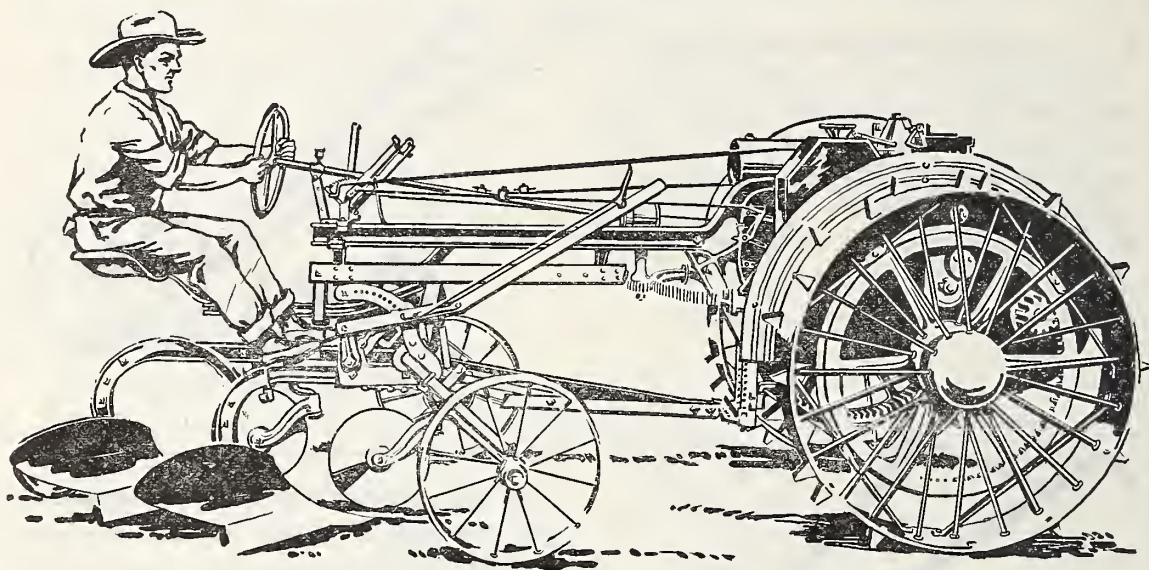
This new seeder has proved to be one of the most successful and accurate planters on the market. With the Columbia you can plant a greater variety of seed and more accurately than any other machine manufactured, and also bear in mind that it has positively a force feed. Seed can be drilled or planted in hills at various distances. Comes equipped with seven seed cylinders, and can furnish extra ones for any special seed you might have. Regular equipment will plant all common vegetable seeds, from the smallest up to beans and peas.



Price on application.

Prices subject to change without notice. (See note on inside first cover.)

MOLINE-UNIVERSAL TRACTOR.



As powerful as 5 horses; as enduring as 7 horses; costs less than 4 horses; requires less care than 1 horse; less room than 1 horse and eats only when it works.

DOES ALL FIELD WORK. — The Moline-Universal Tractor can be used for plowing, harrowing, planting, cultivating, spreading manure and harvesting, in fact, all field work.

FOR BELT POWER. — In addition, it develops from 10 to 12 horse power for grinding, pumping, cutting silage, sawing wood, running lighting or power plant.

ONLY ONE MAN REQUIRED. — The Moline-Universal is a real one-man tractor. It is operated from the seat of the implement attached. This permits one man

to operate both tractor and implement, and removes him from any possible vibration of the engine.

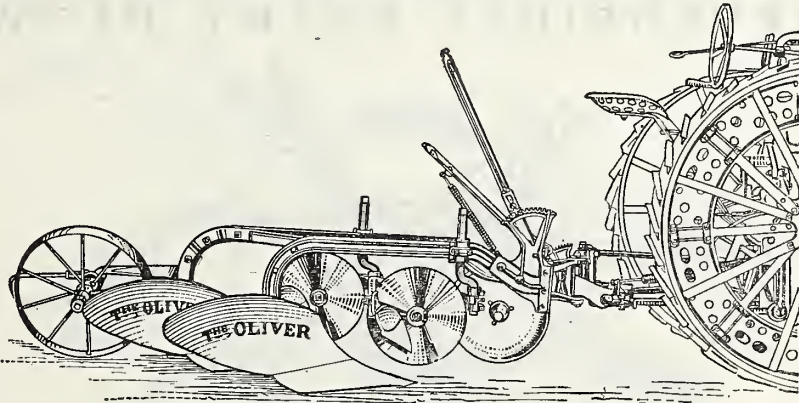
JUST LIKE DRIVING HORSES. — Just like driving a team, but easier. It weighs about the same as a team of horses (2800 pounds), will turn in a 16-foot circle, and will also back, with plow attached. It is compact, simple, close-coupled, a wonderful puller and carries no dead weight.

No other tractor is so adaptable to all kinds of work, versatile or economical, as the Moline-Universal Tractor.

Write for full particulars and for complete illustrated catalog and price list.

Prices subject to change without notice. (See note on inside first cover.)

OLIVER NO. 78 TRACTOR PLOW.



Two Bottom Plow.

Plowing is the hardest work connected with farming. Spring plowing is always done at the time of the year when the horses are soft; fall plowing when heat is intense. It often happens that overheating or an injury to a horse's shoulder causes the death of the horse or makes the horse useless for the remainder of the year. With the tractor plow this danger is eliminated.

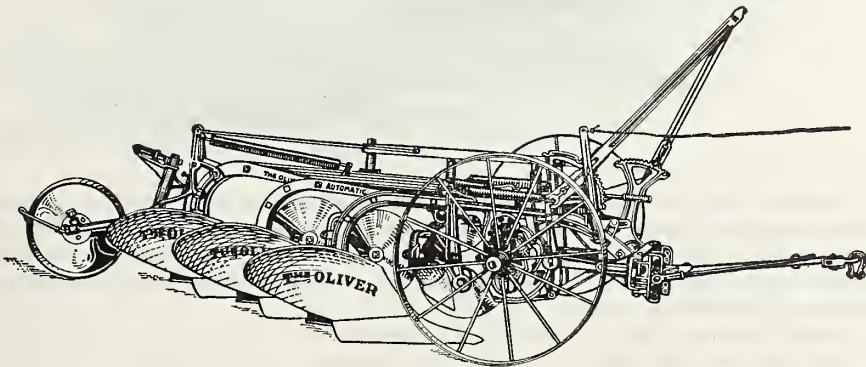
There is much plowing, such as breaking up weedy meadows and turning under stubble, that is done to the best advantage in the fall. By plowing in the fall and allowing sod and stubble fields to lie fallow throughout the winter the ground is in the best condition for the seed bed in early spring. On account of the excessive work on the part of men and horses involved, many farmers slight their fall plowing at a loss in crop yield. Fields that have become too weedy to be of value as meadows often lie unproductive, because the weather is extremely hot, and the ground hard at the time fall plowing should be done.

Oliver tractor plows provide the solution for this difficulty and enable proper plowing to be done when it would be of most value. The horses are freed from this heavy work and are made available for other important work.

Oliver tractor plows scour even under adverse conditions. They turn a smooth furrow, and provide a compact seed bed that is free of air spaces. A wide range of close adjustments enables the operator to turn a furrow of the exact depth desired. When opening the field the bottoms can be adjusted to turn a dead furrow no higher than the rest of the field.

Even depth plowing is done at the end of the field by Oliver tractor plows. The bottoms of all Oliver tractor plows enter and leave the ground points first. For this reason the plows penetrate to full cutting depth or raise to full height in a short space of travel.

The No. 78 can be changed from a two to a three bottom plow very easily and quickly. When plowing conditions are hard and the tractor power limited this plow can be used with two bottoms. Under favorable conditions the third bottom can be added and maximum results obtained from the available horse power.



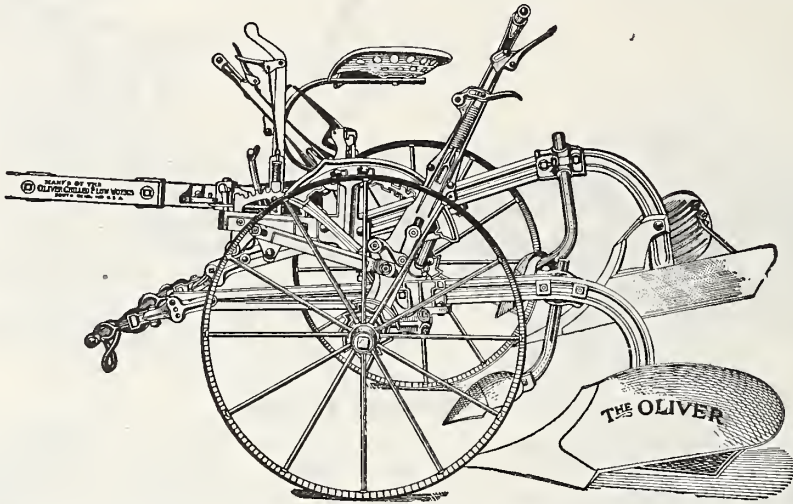
Three Bottom Plow.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

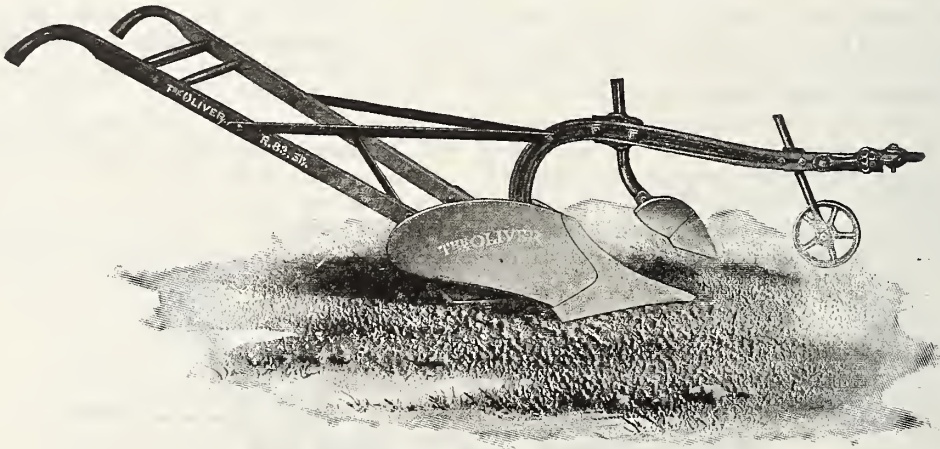
OLIVER PLOWS.

REVERSIBLE SULKY PLOW.



The No. 23A Oliver Sulky Plow is not only one of the best in theory and practice, but the most expert and careful workmanship guarantees every plow as near perfect as human effort can make it. By means of a "horse lift," which is brought into play by simply pressing forward slightly on the foot trip, the operator's work is diminished by fully one-half and it is not necessary to use the hand lever. With this plow the operator can keep his eyes on his team and his hands on the reins—the feet only are needed in order to raise the plow. The wheels have staggered spokes and wide tires and are set so as to insure strength, easy running and long life. Made with either chilled or steel mouldboard as purchaser may wish.

NOS. 82, 83 AND 84.



Nos. 82, 83 and 84 plows are especially designed for general purpose work, and having superior turning qualities are well adapted to sandy, gravelly and stony soils. The long, graceful turn to the mouldboards also fits them for work in sod, in the turning and laying of which they give particular satisfaction. The plows are steady running, light in draft, easily handled and strongly braced. Made with either chilled or steel mouldboard as purchaser may wish.

No. 82. A light two-horse plow. Capacity, 6 x 12 inches.

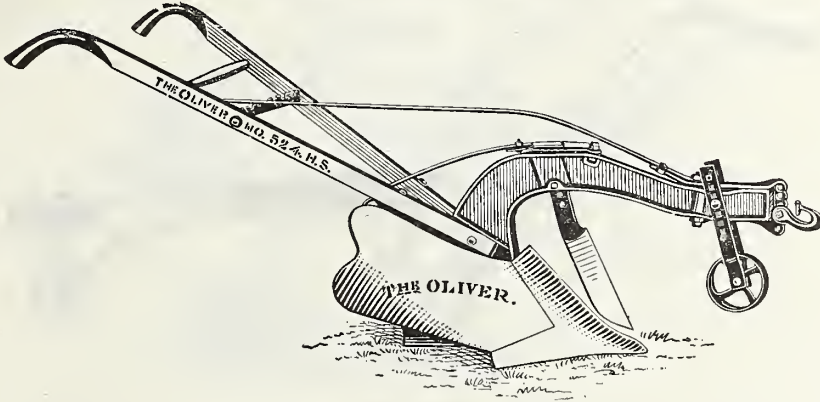
No. 83. A medium two-horse plow. Capacity, 7 x 13 inches.

No. 84. A large two-horse or medium three-horse plow. Capacity, 8 x 15 inches.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

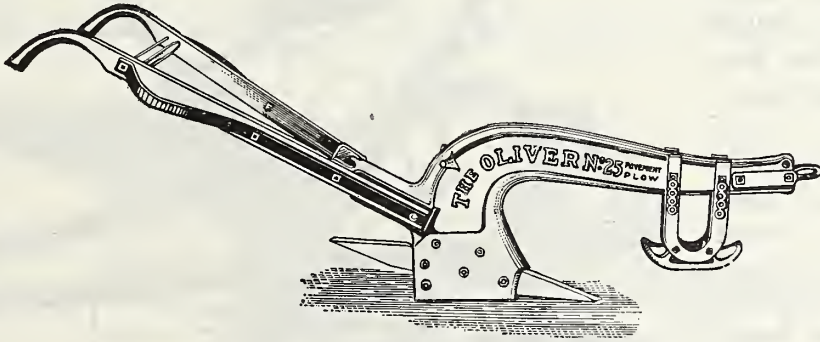
OLIVER HILLSIDE PLOWS.



No. 524 Hillside Plow.

This plow enjoys an enviable distribution. Its lightness of draft, strong and durable construction, exclusive features, remarkable adaptability to both hillside and level field work, and inimitable Oliver design and finish combined make a style of plow that has found great favor with the farmers. The automatic coulters or jointer is always in line with the cutting edge and always gives satisfaction. The steel lever shifting clevis regulates the width of furrow and is a much appreciated feature. The plain clevis may be had if preferred. These hillside plows work perfectly when reversed either way. Look this plow over before you decide what to purchase. Made with either chilled or steel mouldboard as purchaser may wish.

OLIVER ROAD AND GRADING PLOWS.



The Oliver No. 25 Pavement Plow.

"THE PLOW FOR THE CONTRACTOR."

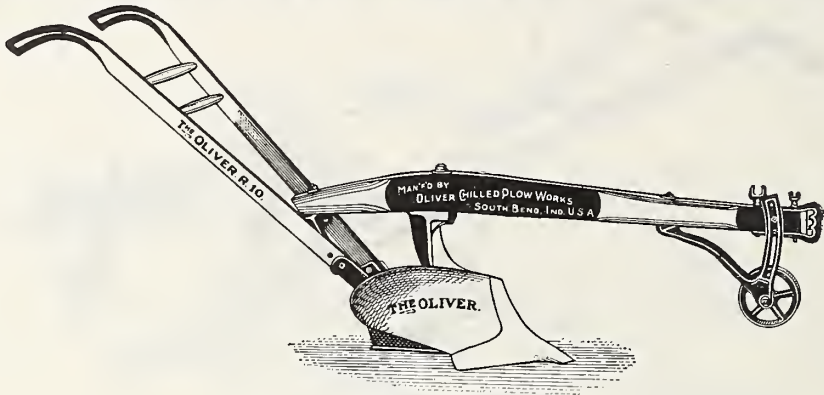
Contractors demand a plow like the Oliver Pavement Plow. It does the work and saves time and money. Note the adjustable and double reversible, crucible, self-sharpening spike steel point, the hanging adjustable gauge shoe with chilled wearing parts, the well-braced handles with loop handle wear irons, and its massive beam with extremely heavy upper and lower flanges, insuring plenty of strength. The point is made of the highest grade of steel, and being double reversible gives the maximum of service. This plow is as strong as it looks. It is built for a purpose, namely, to give the contractor a tool that will stand up under all kinds of hard work. The Oliver Pick Plow is precisely the tool for breaking cobblestones, pavement or any unusually hard ground.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

OLIVER CHILLED ONE HORSE PLOW.

MADE WITH BOTH STEEL OR WOOD BEAM.



No. 10.

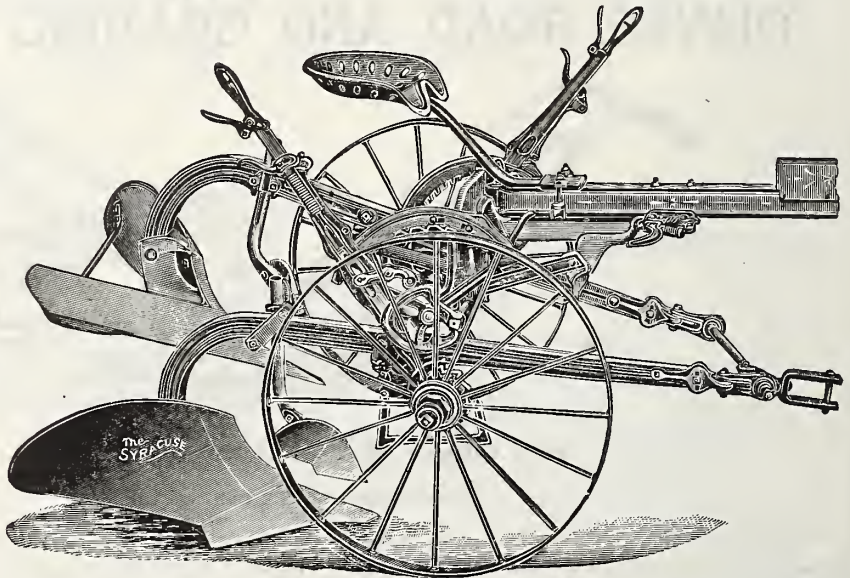
Furnished complete with wheel and coulter. Its lightness of draft and strong and durable construction make it a most satisfactory plow for small gardens and for furrowing.

Price on application.

SYRACUSE SULKY PLOW.

THE FIRST PRACTICAL SULKY PLOW MANUFACTURED, AND IS STILL ONE OF THE BEST ON THE MARKET.

Hardened steel mouldboards and steel strips. Chilled or steel shares. For two or three horses, as ordered. Does perfect work on hill-side or level land. No ridges or dead furrows. Steel wheels with removable chilled boxes and dust-proof caps. The beams, jointer standards and bails are of steel.



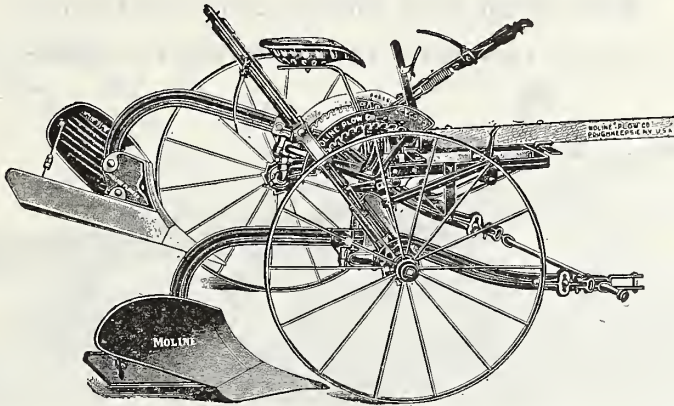
The demand for this kind of riding plow has increased rapidly of late years, as the feature of having level fields without dead furrows or ridges has commended itself to the most successful farmers.

As appears in the cut, two flat land plows are mounted on separate steel beams and the movements of each controlled by a separate lever. In use one plow is raised, while the other turns the furrow. At the end of the furrow this plow is raised by pressing down on the foot trip, which transfers the labor to the team and automatically unlocks the plow when clear from the ground, leaving the driver both hands with which to manage his horses in turning. After the turn is made and the other plow lowered, the whiffletrees slide automatically to place at the end of the long clevis in front of the working plow, so that the plow draws in line of draft.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

MOLINE TWO-WAY SULKY PLOW.

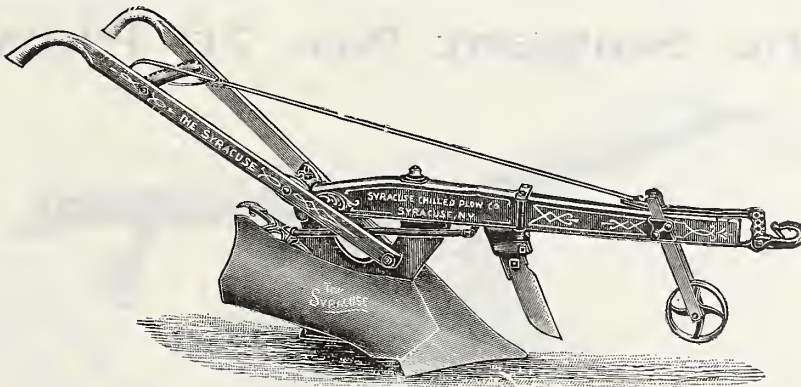


There is a constantly increasing demand for two-way sulky plows to work on hillsides, and to eliminate dead furrows. Up to the present time they have not become as popular as they should on account of the crude construction of two-way plows. Knowing these conditions, we have produced the Moline Two-Way Sulky Plow. This plow is original in design, and is distinguished by its neatness, strength, ease of operation and lightness of draft.

Regular equipment: Chilled double flanged landside; chilled shares; chilled breast (or shin); steel mouldboard; adjustable cross clevis; steel cross bar; swivel connection on beam; roller and swivel connection for doubletree; combination two or three-horse steel eveners, with two or three-horse combination neck yoke; regularly equipped with two extra D. S. shares; right and left hand jointers, or coulters.

Price, complete, \$65.00.

SYRACUSE DIAMOND PLOWS.



This series has proved very popular in New England. They are light weight, of good capacity and handle easily.

THESE PLOWS ARE MADE WITH STEEL MOULDBOARD.

◇A MEDIUM TWO-HORSE, CAST SHARE, STEEL BOARD.

◇B LIGHT TWO-HORSE, CAST SHARE, STEEL BOARD.

◇C ONE-HORSE, CAST SHARE AND CAST BOARD.

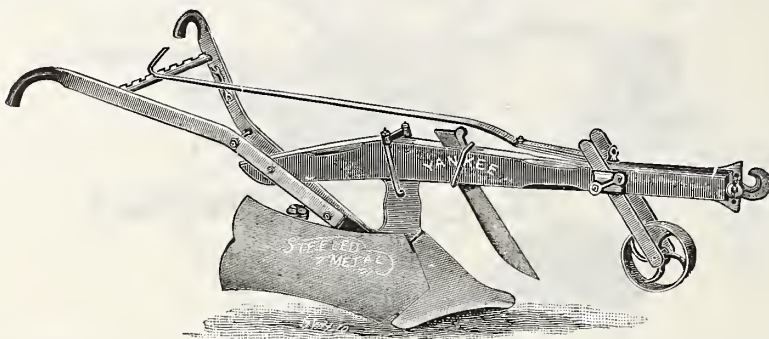
Price mailed on application.

Prices subject to change without notice. (See note on inside first cover.)

THE YANKEE SWIVEL PLOW,

With Patent Steel Shifting Lever and Clevis.

IN SIZES FOR ONE, TWO OR THREE HORSES.



The special distinctive feature in the Yankee is the patented steel shifting lever and clevis, which, as shown in the above cut, consists of a steel lever attached to the clevis, held stationary and firmly in position by iron notches between the handles. When this lever is moved by the plowman, either to the right or left, which can be done instantly without stopping the team, the width of the furrow is changed. The excellence of such an arrangement will be seen by all, especially in view of the fact that heretofore reversible plows, as usually made, have no means of adjustment of any kind, and have frequently been condemned in consequence. Not only is this attachment so easy of operation that a child can manage it, but being of simple construction it will never get out of order. These plows are made from patent steeled metal, with beams and handles of best Eastern white oak.

The H series of Yankee Plows shown on this page, with patent spring foot latch, have to a large extent superseded the hand latch. This latch is an invaluable improvement, as, being operated entirely by the foot, the plow is ready for work as soon as reversed, which is done without taking the hands from the handles, or stopping the team. It is simple, strong and durable, and does not get out of order.

Price on application.

The Sargent No. 76 Plow.



This series has proved very popular in New England. They are light weight, of good capacity and handle easily.

THESE PLOWS ARE MADE WITH STEEL MOULDBOARD.

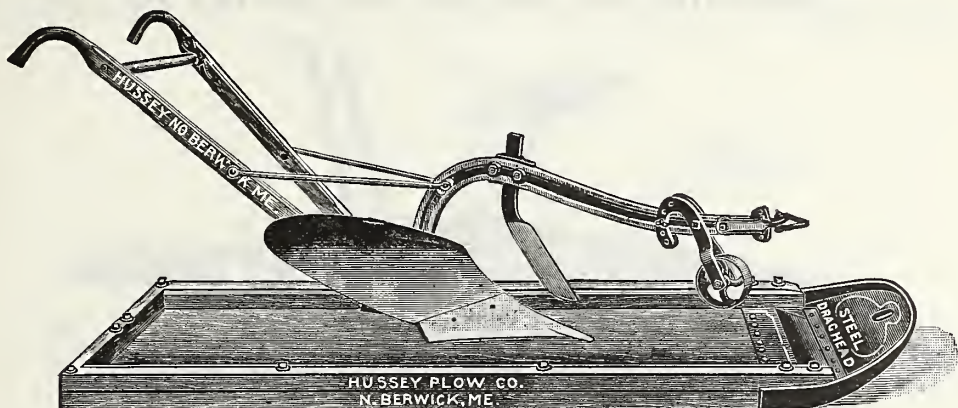
76A MEDIUM TWO-HORSE, CAST SHARE, STEEL BOARD.

76B LIGHT TWO-HORSE, CAST SHARE, STEEL BOARD.

Price mailed on application.

Prices subject to change without notice. (See note on inside first cover.)

HUSSEY PLOWS.



These plows are very strongly built, have the regular "Hussey" shaped mouldboard, which is so much liked by New England farmers, are made of the best materials throughout, are easily held, and are as nearly complete and satisfactory in every respect as the most critical can ask.

No. 23. MEDIUM OR LIGHT TWO-HORSE PLOW. Steel Mouldboard, "Hard Metal" Point.

Cuts from 4 inches to 7 inches deep, 11 inches to 13 inches wide.

Weighs, complete, 120 lbs.

No. 26. LARGE TWO-HORSE PLOW.

No. 28. LARGE THREE-HORSE PLOW. Steel Mouldboard, "Hard Metal" Point.

Cuts from 7 inches to 9 inches deep, 14 inches to 18 inches wide.

Especially adapted for breaking up new land.

Weighs, complete, 162 lbs.

No. 102. (Wood Beam.) LIGHT TWO-HORSE PLOW.

Cuts from 5 inches to 7 inches deep, 12 inches wide.

Weighs, complete, 82 lbs.

No. 104. MEDIUM SWORD PLOW.

Cuts 8 inches deep, 16 inches wide.

Weighs, complete, 111 lbs.

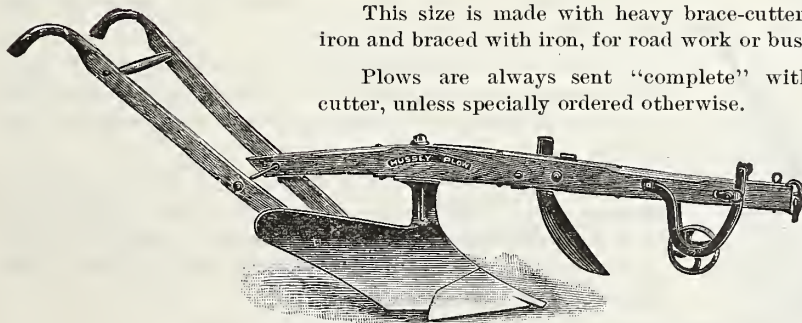
No. 108. (Wood Beam.) HEAVY ROAD OR BUSH GROUND PLOW.

Cuts from 8 inches to 10 inches deep, 18 inches to 20 inches wide.

Weighs, complete, 190 lbs.

This size is made with heavy brace-cutter, and beam laid with wrought iron and braced with iron, for road work or bush ground.

Plows are always sent "complete" with wheel and common sword cutter, unless specially ordered otherwise.



WOOD BEAM HARD METAL PLOW.

Descriptive Catalog,

showing

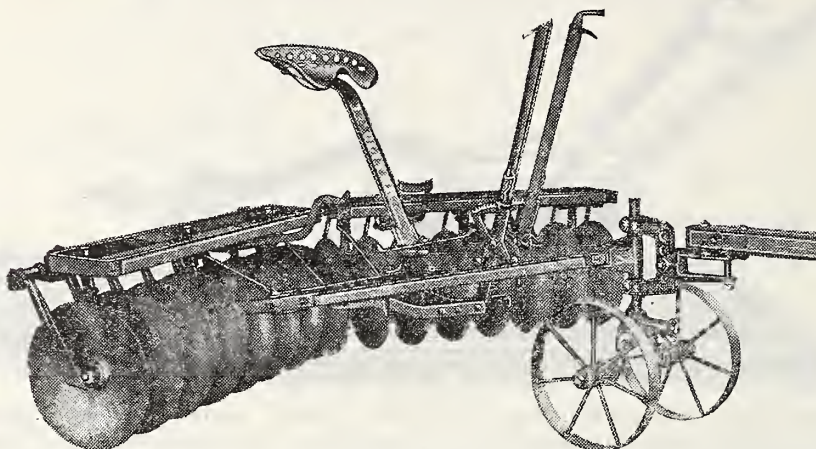
Complete Line,

mailed on application.

Prices subject to change without notice. (See note on inside first cover.)

OLIVER DISC HARROW.

SIZES: 10 x 16; 12 x 16; 12 x 18; 12 x 20.



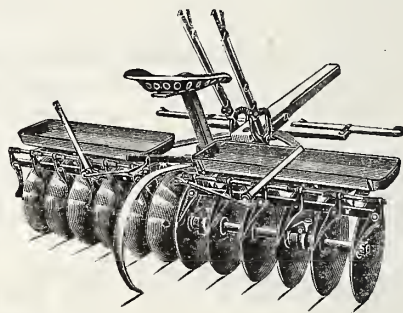
Frame, constructed from angle steel, is sufficiently large to make it strong and durable. The discs are finely made and shaped, to insure perfection in pulverizing and in entering the soil.

Price on application.

OSBORNE

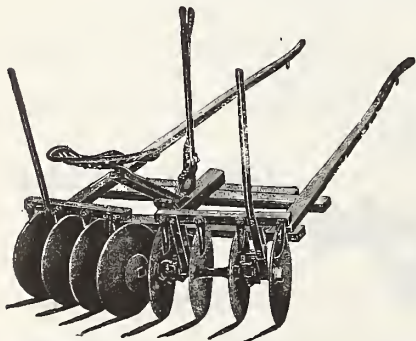
RIVAL DISC HARROW.

We are very glad to offer our customers the Osborne Disc Harrow, for we know that satisfaction follows every sale. Equipped with weight boxes, center teeth, and two levers leaves nothing to be desired. We have it in all sizes, both solid disc and cutaway. Can be furnished with tongue truck if desired.



Price on application.

ONE-HORSE YANKEE PULVERIZER.



The demand for a one-horse disc harrow with lever, giving greater freedom to the user, has caused us to make this late addition to our large line of harrows.

As will be noted by the cut, this harrow is equipped with the buffer feature made popular in the Yankee series, as preventing the excessive wear on the boxes and hard draft found on other patterns.

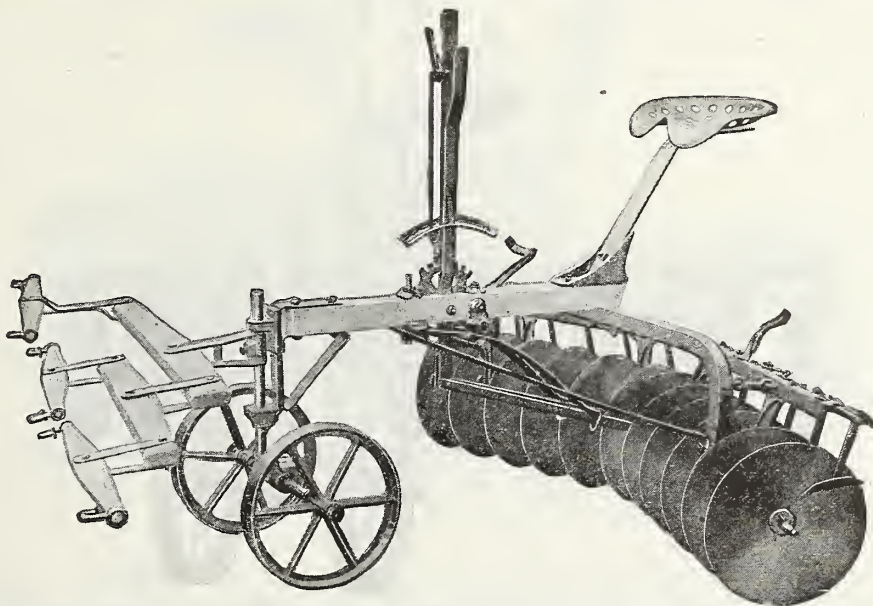
The scraper attachment is operated by levers. The seat standard is made with a steel spring, which insures easy riding. The same draft boxes used in other disc harrows, and which have proven excellently adapted for the work, will be found in this harrow.

No. 1. Has eight 16-inch plain steel discs, which cut four feet wide.

Price mailed on application.

Prices subject to change without notice. (See note on inside first cover.)

THE WALTER A. WOOD DISC HARROW WITH POLE TRUCK.



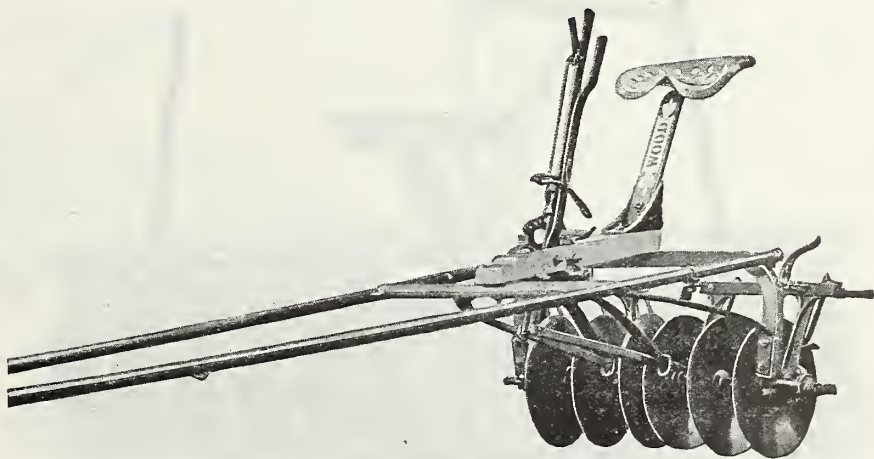
The Wood Disc Harrow is one of the most efficient tools. It cuts and covers the weeds and stubble; cuts the sod without pulling it up.

The value of fall plowing in many sections is being recognized more and more. The disc harrow for spring use is, therefore, becoming more and more valuable.

Even when plowing in the spring the disc harrow will prove valuable. By cutting up trash first, when the plow comes along the ground settles down more quickly than if the trash were turned under whole. Of course after spring plowing the disc harrow will be needed to get the seed bed into shape as quickly as possible.

THE WALTER A. WOOD ONE-HORSE DISC HARROW.

In addition to being constructed of the best material and in the most workmanlike manner, the Wood Disc Harrow is the only one possessing perfectly loose, flexible, ball-bearing gangs controlled by adjustable spring pressure. This pressure is regulated by means of a foot lever to correspond with the work that is being done. The results of this feature are: Saving of discs, reduction of draft and great improvement in cultivation. Among the

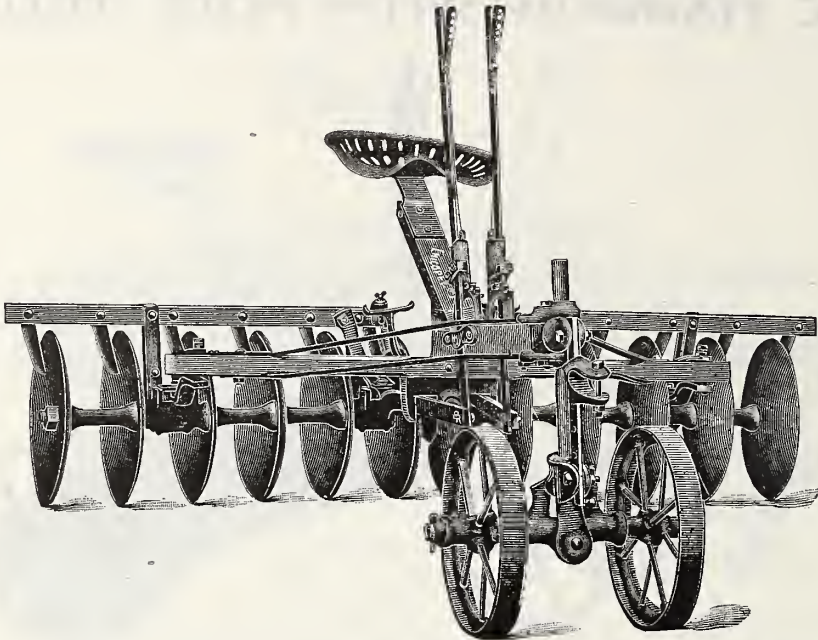


many one-horse harrows in the market, the Wood stands out because of its spring, flexible, ball-bearing features.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

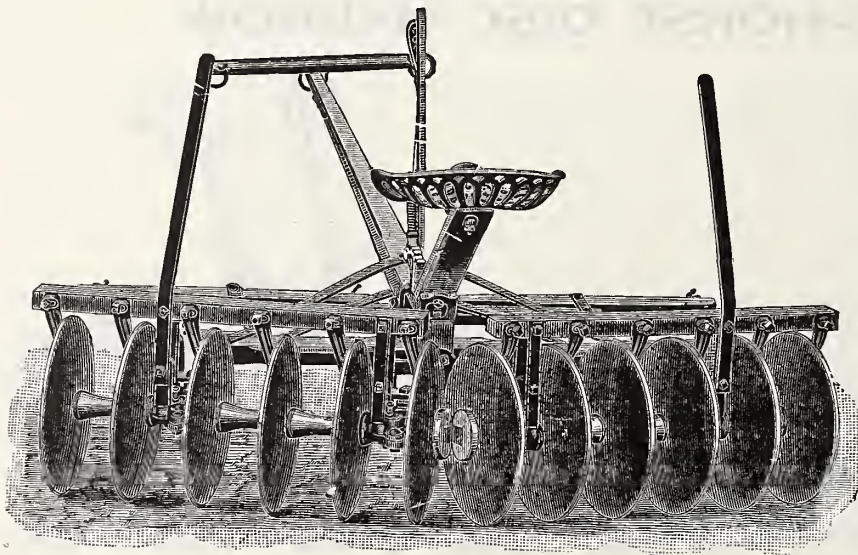
CHICOPEE DOUBLE LEVER DISC HARROW.



A disc harrow with two levers, giving greater freedom to the user in making a wider range of adjustment possible on rolling or hillside land, is found in the "Chicopee." As will be noted by the cut, this harrow is equipped with the buffer feature, preventing the excessive wear on the boxes and hard draft. The pole is placed at a sufficient height to give good throat clearance and at the same time draw in line of draft from the axle. This is an important feature which should not be overlooked when buying a new harrow. The scraper attachment is operated by the feet. The seat standard is made with a steel spring, which insures easy riding. The same draft boxes used in our other disc harrows, and which have proven excellently adapted for the work, are also used in the new Chicopee.

Price on application.

THE YANKEE DISC HARROW.

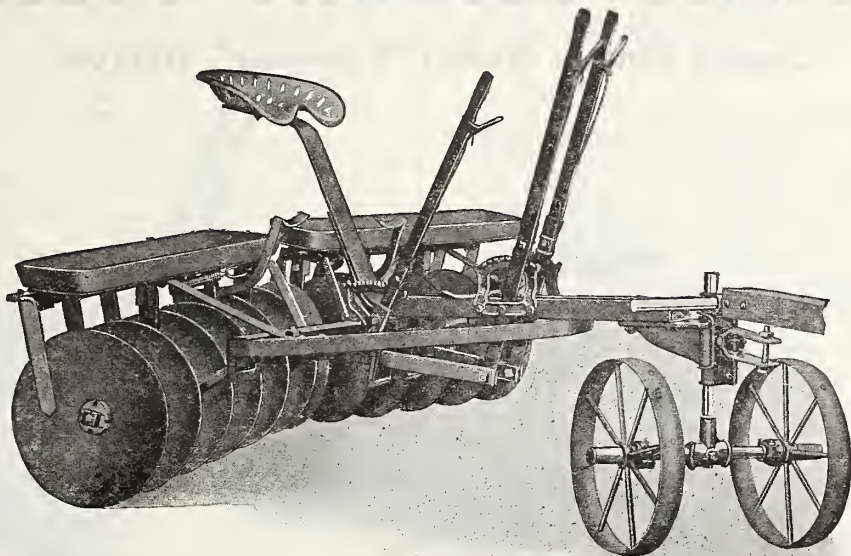


Patent buffers, preventing end pressure upon the boxes and all friction and wear at the center—an invaluable feature. Direct draft, with no weight upon the horses' necks. Adjustable upon uneven ground and cuts over the whole surface. Patent shifting lever for angling the gangs. Patented reciprocating scraper attachment operated from the seat. Made in one and two horse sizes.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

RICHARDSON DISC HARROW.



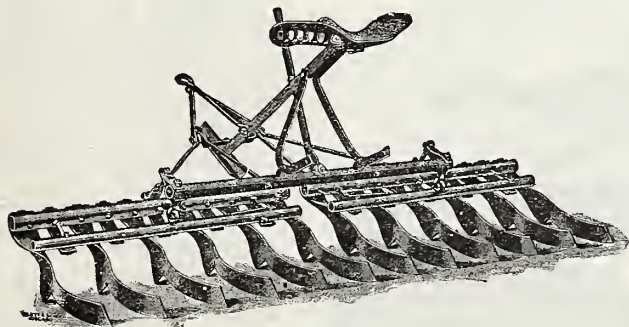
In no section of the country is the disc harrow subjected to so severe strain as in the East. The long wear demanded makes strength imperative. Even penetration of the gangs through hollows and dead furrows, and over ridges and back furrows, makes flexibility a necessity. A pressure lever or third lever at the driver's hand controls this depth of penetration, this feature insuring flexibility at all times. The rigid front frame, of angle steel, riveted and braced at the corners, makes it impossible to spring out of shape. The axle is extra size, being $\frac{3}{4}$ inch square. The boxes are fitted with wooden bushings, are dust-proof, and lubricated by grease cups close to the bearing.

The harrow is equipped with or without weight boxes, with or without pole truck.

Fore carriage or pole truck is supplied if ordered, and prevents lashing of the tongue and therefore eases the team. It aids in turning corners and is very popular wherever used. The regular pole shipped with the harrow fits the fore carriage, and can be used or not, as desired.

Two-horse equipment is regularly furnished with 16 and 18 inch discs; three-horse equipment with 20 inch discs.

ACME PULVERIZING HARROW, CLOD CRUSHER AND LEVELER.



The coulters on the "ACME" Pulverizing Harrow work down between the furrow slices, filling the air spaces with finely pulverized soil. The lumps and clods are entirely broken up and pulverized. Trash or stubble that has been plowed under is not dragged to the surface, but is left beneath the surface, where it rots rapidly and adds humus to the soil. The seed bed prepared by "ACME" Pulverizing Harrows is well compacted so that the seed will germinate rapidly; the surface is finely mulched so that all moisture is conserved. The user of the "ACME" Harrow will find that, although the season be dry, the seed bed prepared with an "ACME" Harrow will attract and retain sufficient moisture to

carry it through to a successful crop. All parts of the harrow are steel and practically indestructible. The coulters are made of a special mixture of several kinds of steel and are oil hardened. The frame of the harrow will last indefinitely, and after the coulters have been worn out new ones can be procured, which will make the harrow just as good as when it originally left the factory. We carry in stock "ACME" Harrows made for one and two horses.

Prices quoted on application.

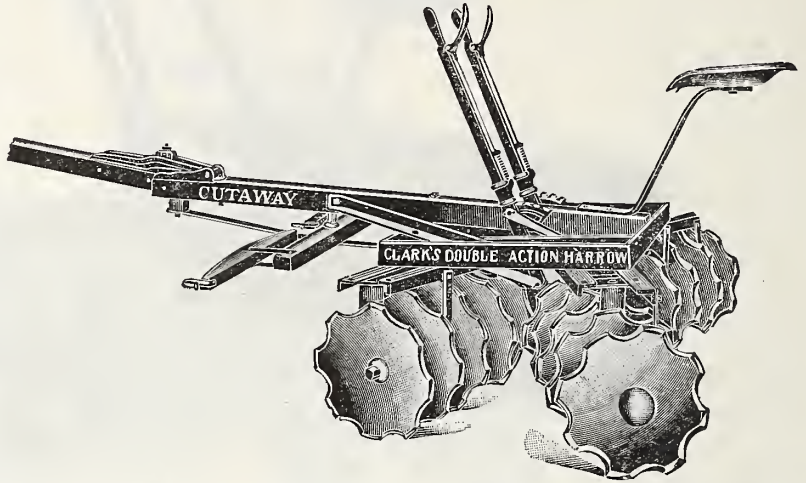
Prices subject to change without notice. (See note on inside first cover.)

CLARK'S "CUTAWAY" TOOLS.

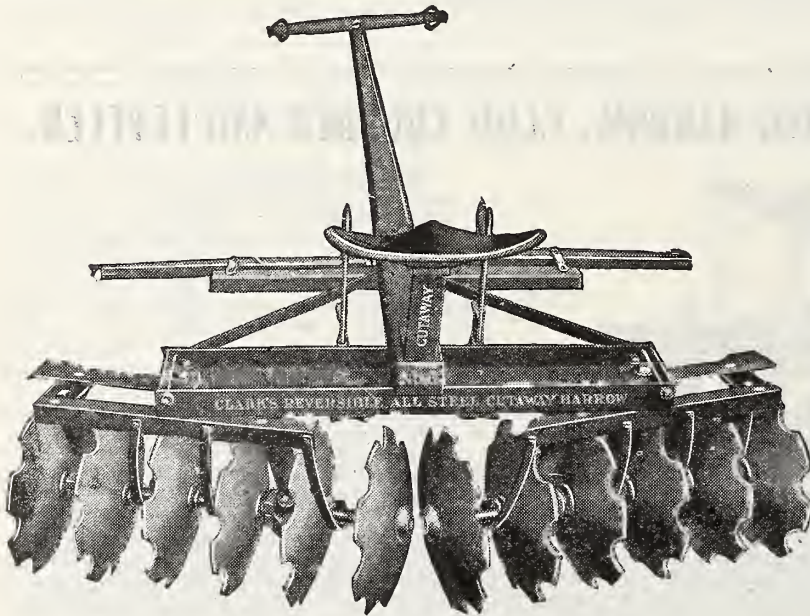
Clark's Double Action "Cutaway" Harrow.

These machines have four gangs of discs, two in front and two in the rear. The front gangs loosen and break up the dirt and throw the dirt out; the rear gangs throw the dirt in. All four gangs are carried by a main frame that gives a very strong, unyielding connection between them. The rear discs are placed so as to track between the front discs and the main frame holds the rear discs to their work, keeping them from dodging to either side and holding them in the ground, no matter how hard the land is. Any trash passing between the front discs is cut up and turned under by the rear discs, where it will turn into plant food. Having a four-point bearing on the ground these machines run steady and true in the line of draft. The draft of these machines is very light, as the rear discs work in loose soil and consequently are drawn easily.

The whole machine, with the exception of the pole, is made of either iron or steel. The main frame and the gang frame side pieces are made of heavy angle iron. The strain of the gangs is taken up by angle iron bars, one above and one below the inner end of the gang frame. Both side pieces on each gang extend out between these bars. Heavy pipe standards are used, with the oil hole for the bearing at the top of the standard.



Clark's Reversible Double Lever "Cutaway" Harrow.



Clark's "Cutaway" Harrows have been in many competitive tests and have invariably come off victorious. No other harrow will stand up and work the wool grass or salt grass sod, or other hard sods that are often found, like Clark's Disc Harrows. In fact, we have never found any hard lands that the "Cutaway" will not work.

Clark's "Cutaways" are light in weight, yet heavy enough to properly enter the ground; light on horses; strong and durably built to withstand the severest strains without breaking.

On all of Clark's "Cutaway" implements, the edges of the discs are hand forged and tempered, making them much stronger, and causing them to hold a sharp cutting edge longer than ordinary discs.

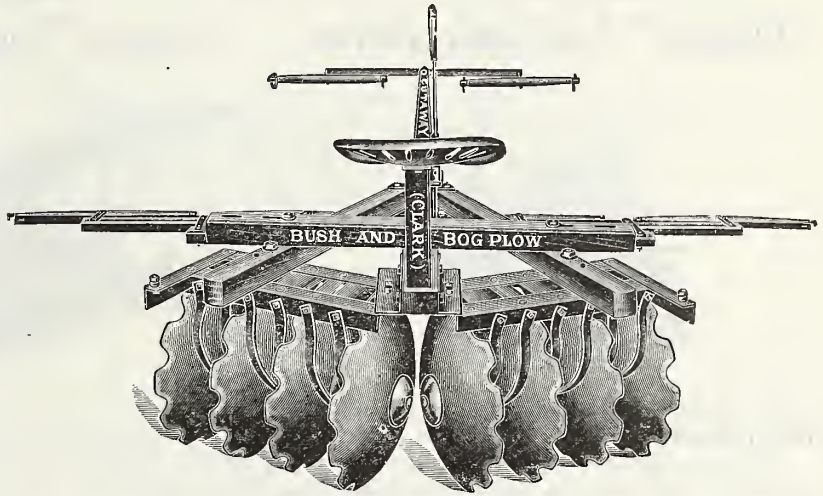
Price on application.

Prices subject to change without notice. (See note on inside first cover.)

CLARK'S "CUTAWAY" TOOLS.—Continued.

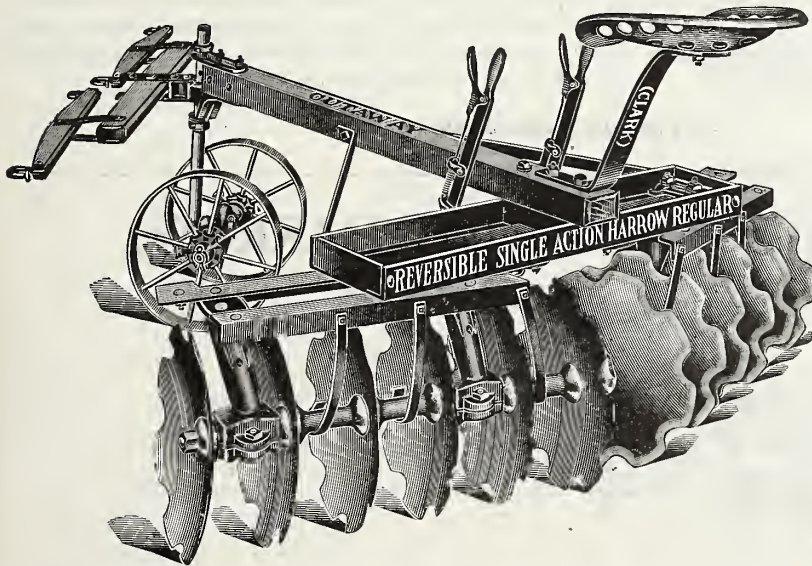
CLARK'S "CUTAWAY" BUSH AND BOG PLOW.

On many farms are fields lying waste, simply because their owners do not know how cheaply and quickly they may be put under cultivation. The old, expensive, hand-labor method is no longer necessary. Much work that could be done heretofore only by slow, tedious and hard labor with an axe, bush knife and shovel can now be done with the "Cutaway" Bush and Bog Plow. This machine is built very strongly throughout and stands up under work that would totally wreck other machines. In fact, it does work for which there is no other tool. For cutting brush land and cut-over bogs, or for doing any extraordinarily hard plowing and discing, the "Cutaway" Bush and Bog Plow stands in a class absolutely by itself. Among those farmers and orchardists who till unusually deep it is used for general cultivation and considered an indispensable part of the equipment. It is reversible; that is, the gangs can be exchanged so that the soil may be thrown either out or in. It cuts five feet wide and requires four fairly good horses to operate most successfully. It is not a heavy draft machine, but it is big and sturdy, and does an enormous amount of work.



CLARK'S "CUTAWAY" SINGLE ACTION HARROW.

Regular and with Tongue Truck Extension Head.



Why has this harrow won the support of practically every farmer who owns one? Because, first of all, it does the work; it is one of the most effective tillers ever put in the field. Second, its durability is almost unlimited. Third, it is convenient to handle and easy on the team. To reverse this harrow, you simply disconnect the lever links from the gang frames and swing the gangs around on the king bolts until what were formerly the outer discs become the inner discs, and reconnect the links. In this latter position the discs will throw the soil inwardly. Like those on all other

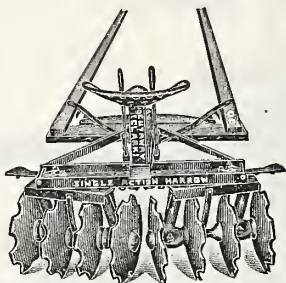
"Cutaway" implements, the discs on this harrow are cutlery steel discs, *forged sharp*. This feature partly accounts for the remarkably long service always given by "Cutaway" disc implements. Forging compacts the molecules in the steel, making the disc much tougher than those sharpened in any other manner. It makes them retain a sharp edge long after ordinary discs are well worn away.

Prices on application.

Prices subject to change without notice. (See note on inside first cover.)

CLARK'S "CUTAWAY" TOOLS—Continued.

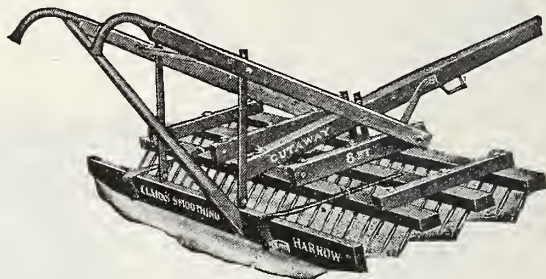
CLARK'S "Cutaway" Ever-Handy Harrow.



This harrow may be used with the gangs (discs) **open or closed**, as desired.

It is made for the express purpose of meeting the needs of the man who has only one horse. By means of the **"Cutaway" Ever-Handy Harrow** intensive tillage is made as economical and as practical for the man with a small outfit as for the man with large equipment. When the gangs are closed the harrow cuts 3 feet wide, each cutting 1½ feet. When they are fully extended the machine cuts 4 feet, 8 inches wide. The **Ever-Handy** is reversible; that is, the gangs may be set so the discs throw the soil either out or in. To reverse it you simply disconnect the lever links from the gang frames and swing the gangs "end for end," and reconnect links. This machine is equipped with 16-inch Clark *forged edge* discs. The journals are hard wood.

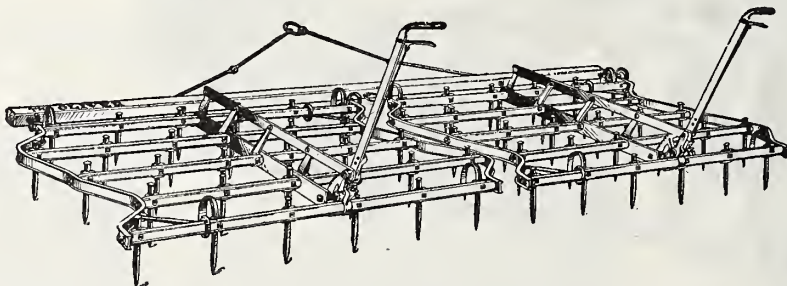
CLARK'S "Cutaway" Smoothing Harrow.



While a large per cent. of the users of "Cutaway" harrows find their machines leave such a smooth, finely pulverized seed bed that a smoothing harrow is not exactly necessary, we recommend this smoother to follow the "Cutaway" harrows. We know that the last degree of perfection in a seed bed pays, and that the **"Cutaway" Smoothing Harrow** will secure for you that perfection. It combines the merits of the spike-tooth harrow and the plank drag. The teeth dig, tear and pulverize, and the plank levels, smooths and packs. Observe the handle, which gives the driver perfect control over the plank and makes it easy for him to carry large or small quantities of soil into the hollows. Also note the steel spring by which the plank is attached.

Price on application.

OLIVER SPIKE TOOTH HARROW.

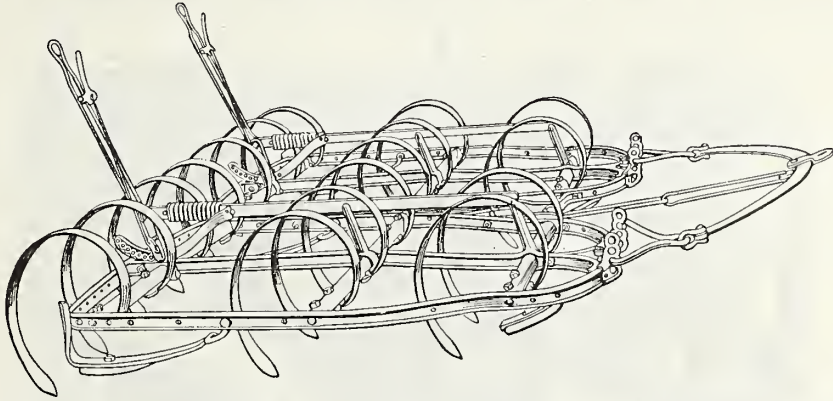


The Oliver Spike Tooth Harrows are equipped with side latch levers that make it easy to control the harrow and provide a grip for lifting the sections to clear the teeth of trash.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

WALTER A. WOOD SPRING TOOTH HARROW.



The use of the spring tooth harrow is increasing as fast as farmers find that it is a most valuable tool for loosening up the ground in the preparation of a seed bed. It is especially valuable in working soil that has been packed, as it leaves no ridges and requires less work later with a smoothing harrow.

Price on application.

ADRIANCE SPRING TOOTH HARROW.

The **Adriance** Spring Tooth Harrow has been a continual success from the day it was first put on the market. For the man who wishes the best, it is a highly satisfactory tool.

Adriance Frame Bars are of heavy channel steel, two inches wide, stiff and substantial. The frames are carried high above the ground, affording sufficient clearance and avoiding obstructions.

Tooth Bars. The tooth bars are heavy steel tubing, one and five-eighths inches in diameter and proportionate weight. Large malleable trunnions are riveted in the tooth bars and pass through the frame, being secured laterally by a washer and cotter. The tooth bars turn freely in the frame bars, yet hold the frame firmly together.

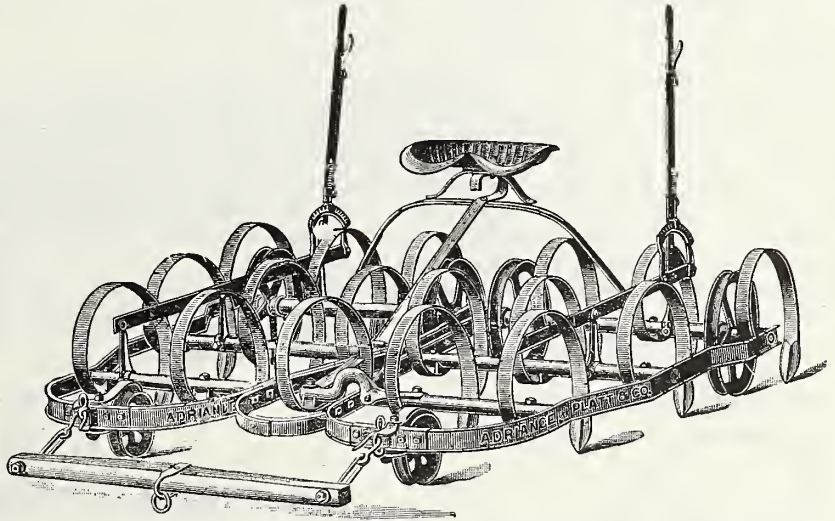
The Spring Teeth. The **Adriance** teeth are spring steel, hardened in oil, and every one is tested before leaving the factory. The greatest precaution is taken to prevent fault, and the hard usage they will stand in actual work proves the **Adriance** are the best. They are one and three-quarters inches wide, and to do the heavy work expected they cannot be lighter and make a successful tool.

The Tooth Fastenings are the simplest and best in use. As the tooth is shaped to wrap closely around its bar, this fastening, one bolt and reinforcing washer, holds it securely.

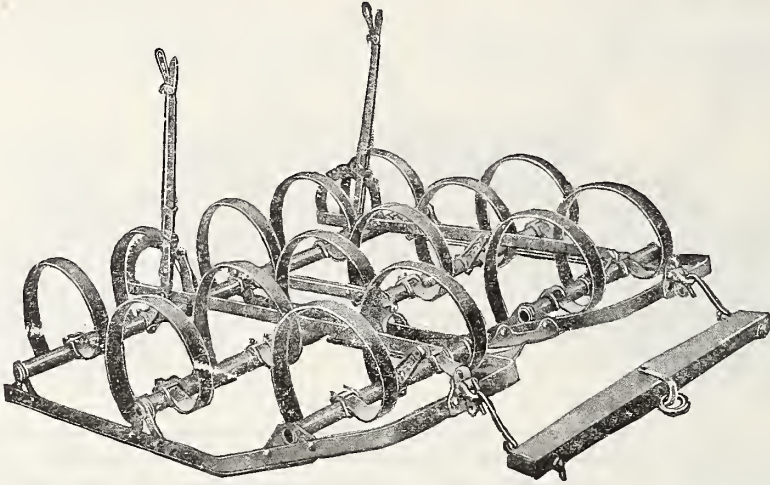
Arrangement of Teeth. An improvement peculiar to the **Adriance** harrow is a tooth between the sections at the front of the harrow; it prevents stones or large lumps from passing between the sections and clogging the harrow. The teeth will not trail; each keeps its line and does its work. The two-section harrow is very flexible and follows uneven ground closely, leaving its entire width of evenly cultivated ground.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)



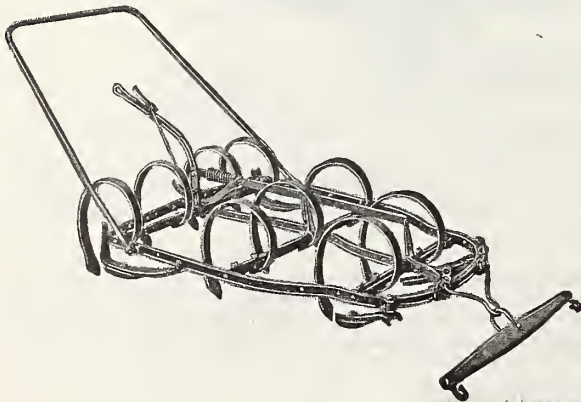
THE BADGER LEVER HARROW.



Made with 15 or 17 Teeth, in Two Sections.

The frame is made of best quality angle steel. Only one runner is used in center of harrow, thereby doing away with the clogging so often encountered in harrows of two or more sections. The frame hinges are of special design, and are unusually successful, allowing the harrow to conform naturally to all conditions. Renewable steel shoes are bolted to under side of frame bars, which absolutely prevent any wear upon the frame and can be replaced at small expense. The tooth or cross bars are of high carbon steel pipe, $1\frac{1}{4}$ -inch diameter. They are attached to the malleable frame brackets by steel rods running the whole length of the pipe on the inside—an extremely strong construction as compared with harrows that have tooth bar connections only at the extreme ends. The tooth clips are malleable and patented, and are the most successful ones in use. The bottom clip is so formed that it protects the tooth and tooth bolts from wear. When the bolts are drawn up, the tooth is gripped by the bottom clip and forced against so much surface of the tooth pipe that it is absolutely impossible for the tooth to slip or become loose. The clip is so designed that it will not slip on the tooth pipe. The clip gives any amount of adjustment desired, and allows a large part of the tooth to be used. **No holes in teeth to weaken them.** It is of the greatest importance that every tooth should adjust individually. When teeth are strained, the depth of cut is changed. When new teeth are used among those partially worn, the points must be adjusted evenly. Sometimes the lever alone will not give as exact adjustment of teeth as desired for fine work. These adjustments are impossible with teeth which are held by bolts passing through them.

Price on application.



WALTER A. WOOD One-Horse Spring Tooth Harrow.

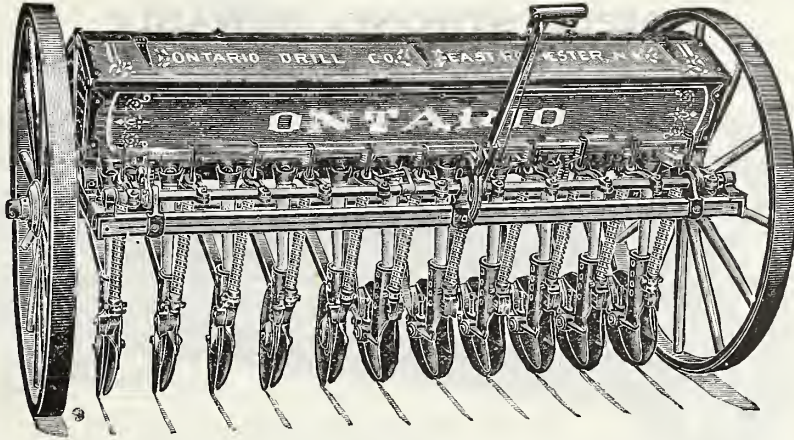
A very popular harrow, used extensively for orchards, gardens and small farms. Made entirely of steel and malleable iron. Is controlled by the handles, as easily as a cultivator. Frame is made of angle steel, and is sloped at the front to avoid obstructions. Has renewable steel shoes.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

ONTARIO COMBINED SINGLE DISC DRILL.

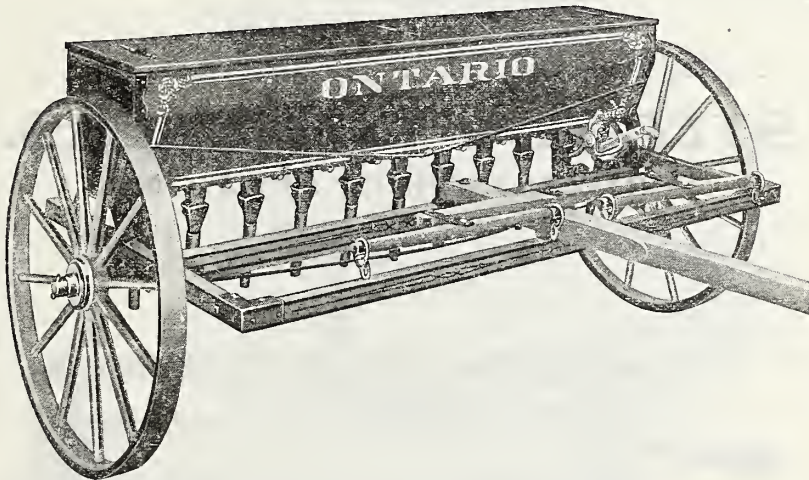
(For Sowing Grass Seed, Grain and Fertilizer.)



The most popular and best adapted style of drill for the New England States. In simplicity of construction, accuracy of operation and lightness of draft, it excels any machine in the world of similar construction and recognized merit.

ONTARIO FERTILIZER BROADCASTER AND ROWER.

Style B.



It is the only positive force-feed machine of its kind made in which the conductors have a lateral adjustment.

Its use is not confined to plaster, bone dust and other mealy fertilizers, for it handles lime and all commercial fertilizers, and is the best device known for handling those of home manufacture.

Sows broadcast or in any width of rows from eight inches up to five feet, in quantities ranging from two hundred to two thousand pounds per acre.

Is equipped with a land measure that does not get out of order. It accurately measures the acres and fractions of acres sown, and is easily set at the nothing mark.

Price on application.

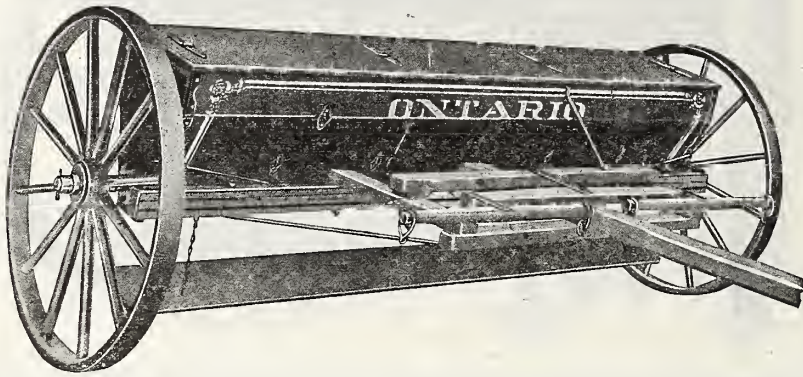
Prices subject to change without notice. (See note on inside first cover.)

THE ONTARIO FERTILIZER AND LIME DISTRIBUTOR.

Style H.

SIMPLE, STRONG, DURABLE.

SOWS BROADCAST.



Built to meet the demand for a simple, practical and comparatively inexpensive machine with which to distribute **lime** and **fertilizer**.

The **quality** of the material used, the **workmanship**, the **design** and the **finish** are all first class.

The parts are few, and are made not only with a view to efficiency, but for strength and durability. The mechanism is of the simplest form and easily understood. It is an honest, durable and practical machine, with exceptional value for the cost. Has proved a useful, handy machine for sowing dry fertilizers, such as plaster, ashes, lime, bone dust, cotton seed meal, salt, etc.

Price on application.

STEEL LAND ROLLERS.

TWO AND THREE SECTIONS.

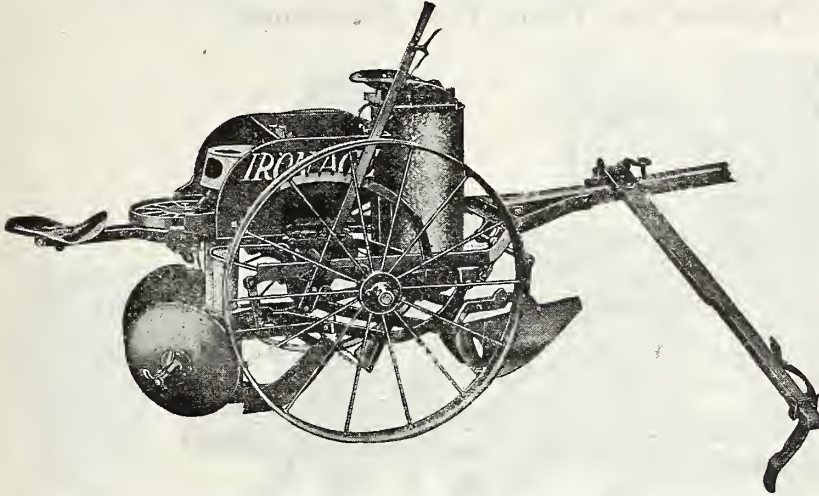


Heavy steel heads are used, making fully closed ends. The rims or drums of these rollers are of the best material of heavy gauge and are firmly riveted to the heads. The hangers are of forged steel and are not easily broken. The bearings in the hangers are wood, and when worn can be replaced at small expense.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

THE "IRON AGE" (Improved Robbins) POTATO PLANTER.



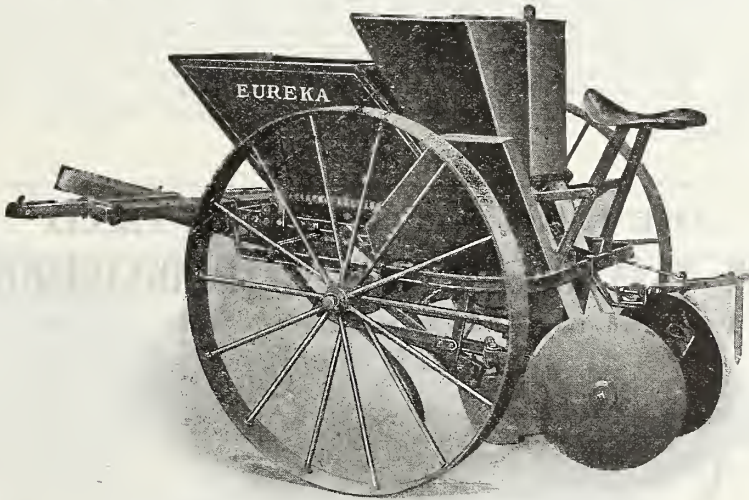
No. 400R. Potato Planter with Fertilizer Distributor (Plow with Shield).
Plain or with Fertilizer Attachment.

Price on application.

This planter is one of the most thoroughly constructed machines offered to the farming public. It is carefully made of the very best materials and consequently is strong, durable and thoroughly practical. It does not injure the seed, although it is all handled automatically. It places every seed piece exactly as you want it. It sows fertilizer at the same time, but none of it where it touches the seed. It is light weight, light draft, strong, compact and is easy on the horses. With the boy on the rear seat you can be absolutely sure that a seed piece is in every place and one only.

EUREKA POTATO PLANTER.

DISC OPENERS SUPPLIED WHEN ORDERED.



No. 11. One Row, Two Horse.

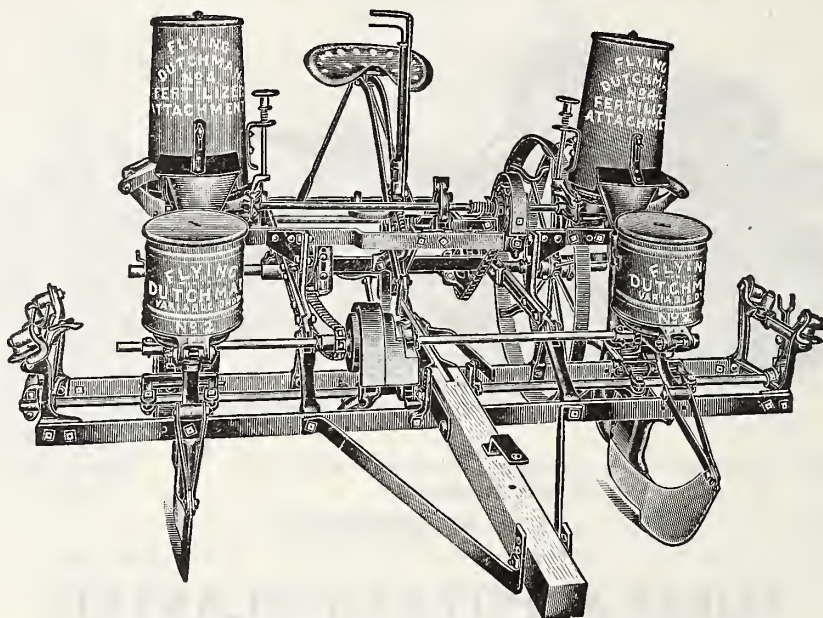
No fertilizer comes in contact with the potato seed. The Eureka discs are so arranged that they allow the seed to be placed, and carefully covered with soil, where it is impossible for the fertilizer to come in contact with seed, consequently there is never any loss from being burned with fertilizer. A valuable feature peculiar to this line of planters. Main frame is made entirely of steel. Wheels are higher and have wider tire than other makes. Under perfect control of driver. Does not require two men. Seed pickers in plain view. No guessing about accuracy. Plow placed directly under axle, and always runs at uniform depth. One lever puts machine in and out of gear, and raises and lowers plow and discs. Planter is perfectly balanced. No neck weight. Seed hopper feeds automatically to picker box. Pickers are special construction and perform more accurate planting and uniform spacing than other styles. Pickers do not squeeze, crush or bruise the seed. Sprockets are easily attached to change the distance of dropping seed. All working parts of planters are in plain view of driver.

Price, \$65.00.

Prices subject to change without notice. (See note on inside first cover.)

FLYING DUTCHMAN CORN PLANTER,

With Fertilizer and Check Row Attachment.

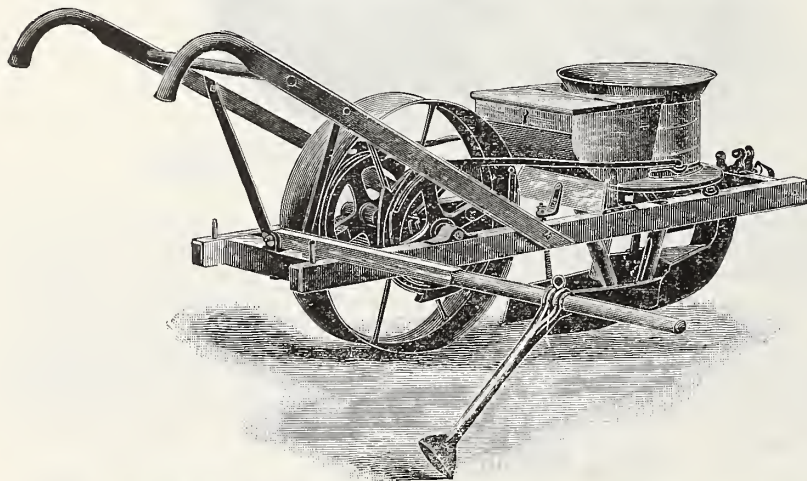


This planter is equipped with side reel, which is the only logical position from which to unwind or wind up the wire. When the wire is handled from the side, directly in line with the wheel, there is no danger of the horses injuring the wire or themselves. It has a rigid frame, to which all parts are securely bolted and braced. The heavy steel runners are extra long, with an easy curve that prevents becoming clogged with trash. The gauge wheels are adjustable for depth as desired. The large press wheels act also as drive wheels, and their very broad face provides abundant traction for operating the fertilizer and dropping mechanism. The dropping device is simple, reliable and extremely accurate, dropping two, three or four kernels to the hill, as desired. Both flat and edge drop plates are furnished in a variety of sizes. Corn may also be drilled.

Price on application.

THE KING OF THE CORN FIELD CORN PLANTER AND FERTILIZER DISTRIBUTOR.

Plants Corn, Beans, Peas, Beets and Other Seeds of Like Size.

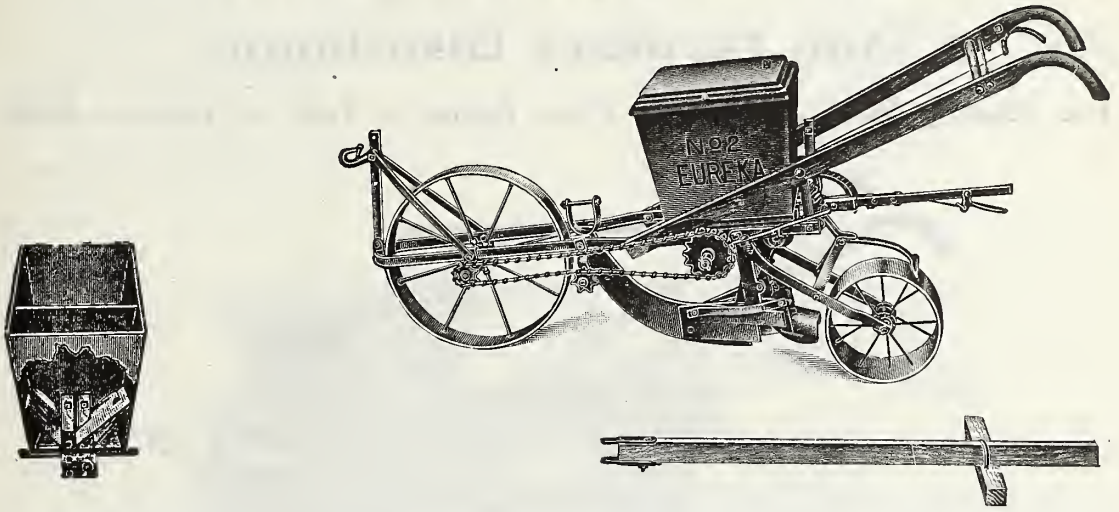


This planter is perfectly adapted to every requirement; durable and simple in construction, not liable to get out of order, and is arranged to drop any desired quantity of seed or fertilizer at a time, at equal and various distances apart, in hills or drills of uniform depth. The seed-dropping device is positive; never misses or skips a hill.

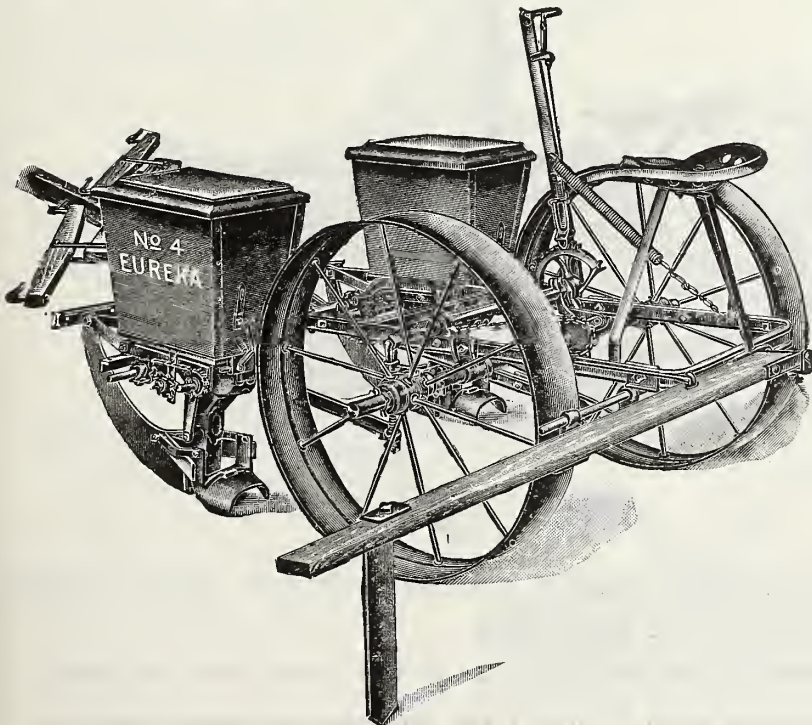
Price on application.

Prices subject to change without notice. (See note on inside first cover.)

EUREKA CORN PLANTERS.



The material used in constructing these planters is almost entirely steel and malleable iron, making a long lived planter with small cost for maintenance. Lock steel chain is used. Nos. 2 and 4 planters have interchangeable parts, and the general description applies to them all. The seed droppers have holes of various sizes with which to deposit seed in the furrows. Brushes remove all surplus seed from the dropper, and prevent any skipping. These planters will drill in continuous rows or drop automatically in hills. No. 2 only is equipped with row-checking device. Will plant any ordinary sizes corn or beans, and will plant them alternately (first a hill of corn and then a hill of beans), if desired. Special attachment may be had to sow small seeds, such as turnip, onions, etc.



When desired, two kinds of seed may be carried separately in the Eureka hopper at the same time and can be dropped alternately. Fertilizer does not come in contact with, but is deposited on each side of the seed.

The Wizard Force Feed is positive and adjustable from 115 to 800 pounds per acre, and is unquestionably the best fertilizer feed manufactured, as it will handle ashes and plaster as well as fertilizer.

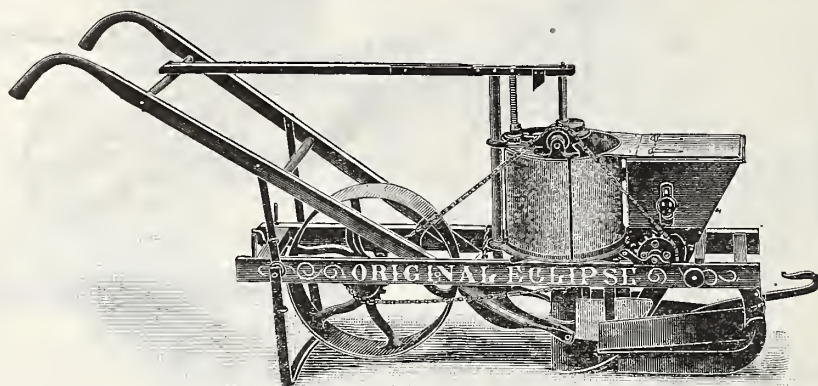
Price on application.

Prices subject to change without notice. (See note on inside first cover.)

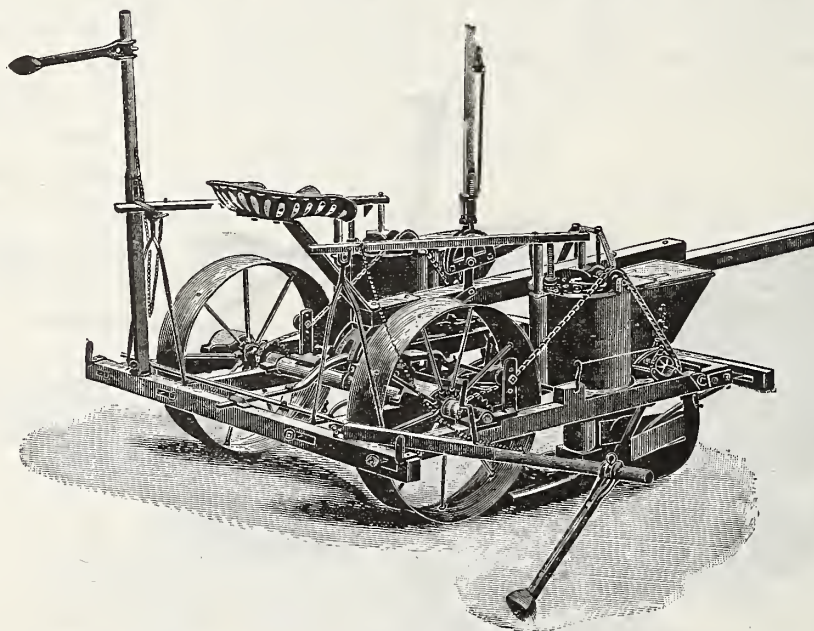
ECLIPSE CORN PLANTER

And Fertilizer Distributor.

For Planting Field or Ensilage Corn, Beans or Peas, in Hills or Drills.



Eclipse Double Row Corn Planter.



Will distribute from 50 to 600 pounds of fertilizer to the acre. Can be adjusted to make the rows 36, 38, 40 and 42 inches apart.

Plows can be adjusted to plant corn from one to four inches deep, as desired.

Descriptive Catalog and Price List mailed on application.

Prices subject to change without notice. (See note on inside first cover.)

"NEW MODEL CENTENNIAL."

No. 8. An extra implement at small additional expense.

The regular 5-tooth Horse Hoe, Cultivator and Coverer combined (No. 1), or an 8-tooth Pulverizer, on same frame.

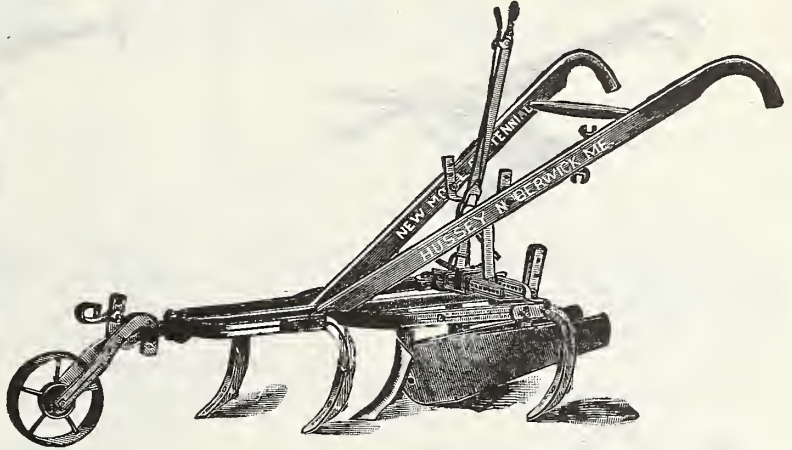
The long frame of the "New Model Centennial" allows us to add the extra teeth without danger of clogging.

No. 8
has eight 1-inch
points, long wings
and lever.

No. 1
has five 1/3-inch
points, long wings
and lever.



Back of Improved
Point, 1 inch wide.



No. 1. New Model Cultivator.

The "New Model Centennial" Horse Hoe, Cultivator and Coverer combined has long been recognized as an implement of unusual merit. The simplicity and fewness of parts required for changing it over to suit the various kinds of work to which it is adapted, and its unique and very efficient expansion lever, are among the reasons for its popularity.

An important improvement has recently been made in the one-inch reversible points for this cultivator.

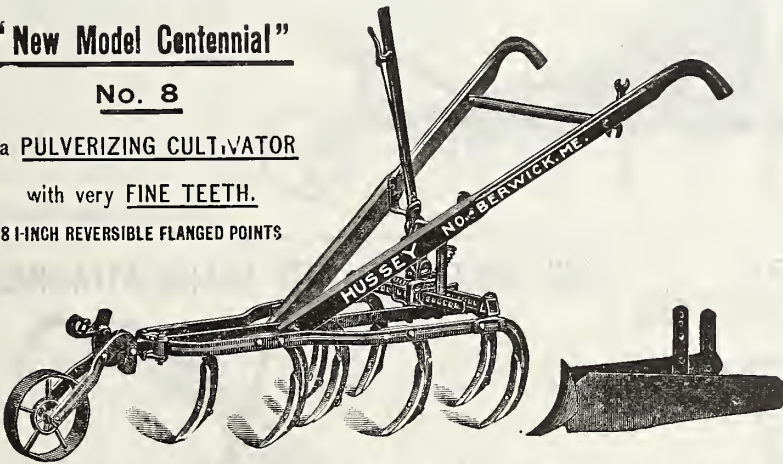
"New Model Centennial"

No. 8

As a PULVERIZING CULTIVATOR

with very FINE TEETH.

HAS 8 1-INCH REVERSIBLE FLANGED POINTS



No. 8 as a PULVERIZING CULTIVATOR with FURROWING WINGS DETACHED.

Price on application.

The illustration at the left shows the improved point with the strengthening flanges. It will be readily seen that the flanged point is not only much stronger than the old style, but the flanges prevent the point from swinging around on the standard in rough and rocky land.

Equipped with eight of these narrow flanged points, the No. 8 is one of the very best pulverizing cultivators on the market

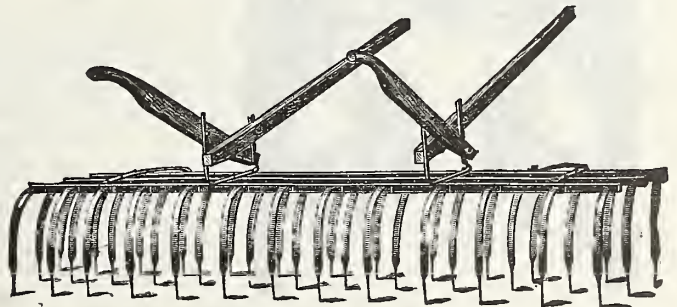
THE "K. & W." WEEDER.

The attention of farmers is called to the great saving effected in time and labor by using the "K. & W." Weeder.

One of the best machines for level cultivation, will not injure the roots of growing crops, but kills out the weeds, and leaves a fine mulch on the surface of the ground.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

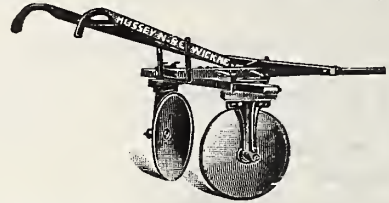


**IMPROVED POTATO HOE,
Furrower, Marker and Coverer.**



The Improved Potato Hoe is, as its name indicates, especially adapted for hilling potatoes, banking celery, and also as a coverer. It is much used as a "marker" for different crops, making the rows parallel and equally distant.

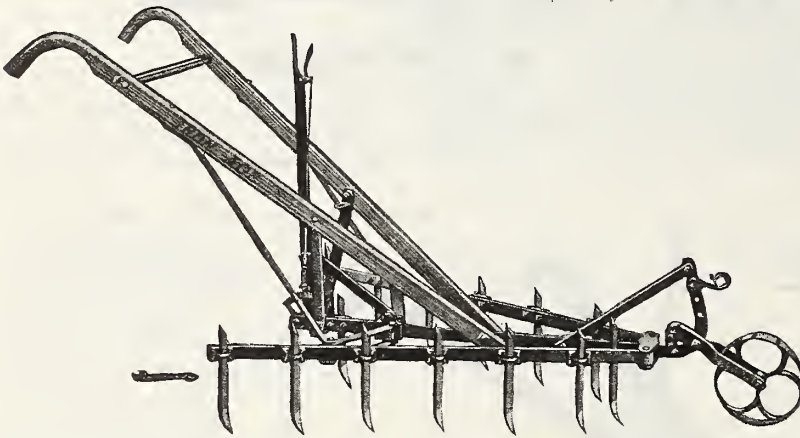
**"K. & W."
IMPROVED 20-INCH DISC POTATO HOE.**



Considered by many farmers the best hoe made for hilling and covering. A distinct departure from the styles commonly in use, the large discs doing smooth and perfect work.

Price on application.

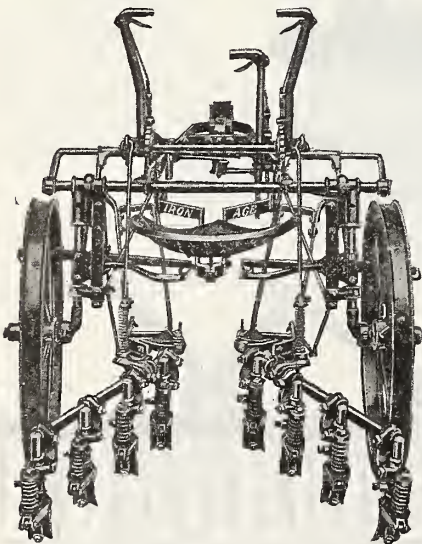
**DIAMOND
TOOTH CULTIVATOR.**



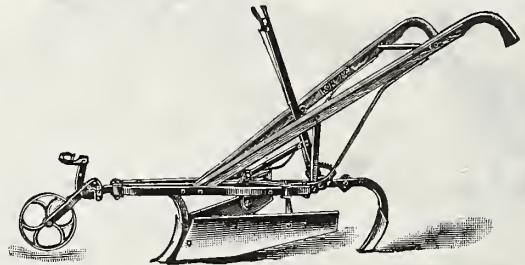
As plainly shown in cut, the teeth are diamond shaped with a small cultivator tooth forged on one end—steel, of course. For very close work, every other tooth can be quickly removed. Cultivating width when equipped with lever expander, 34 inches.

Price on application.

**IRON AGE
RIDING CULTIVATOR.**



DIXIE CULTIVATOR, WITH HILLING ATTACHMENT.



The hilling attachment is applied by simply removing four standards and placing the standard of the hiller on the middle bar and attaching the short standards of the blades to the side bars. This attachment is used in cases where higher ridging is desired than what can be accomplished with the regular horse hoe blades.

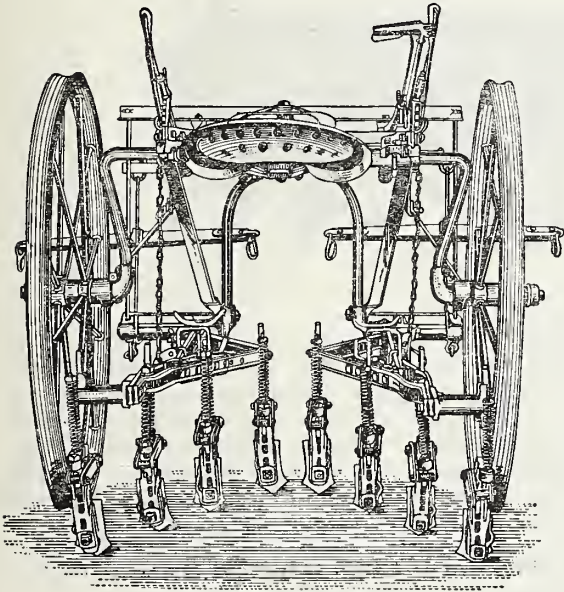
Price on application.

Pivot wheels, gang-adjusting lever, strong steel wheels, and, although it is light and simple in construction, it is very strong, and possesses advantages not contained in far more complicated tools.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

OLIVER RIDING CULTIVATOR, NO. 4 L. Y.

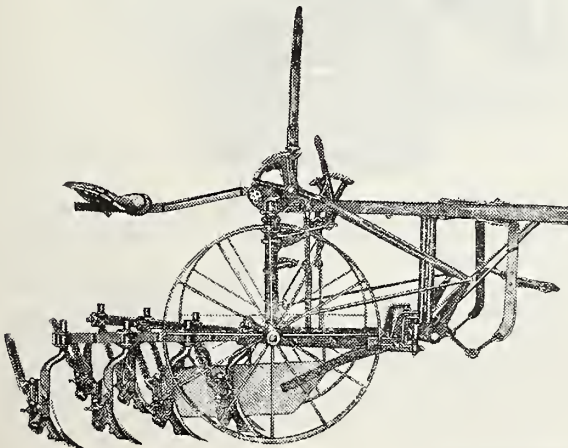


This cultivator has not only satisfactorily met factory tests, but it has gone out in the field and shown what it could do, and how well it could do it, and having been on the market here and in actual service during eight entire seasons, our field tests have been most extensive.

The pivotal seat bar guides the frame and gangs, making unnecessary the use of hand lever, or complicated pivotal foot levers. The guiding of the cultivator, independent of the horses, is completely under the operator's control, and the seat bar guide also automatically keeps the cultivator from drifting on hillsides, making it one of the easiest guiding cultivators made.

Price on application.

OLIVER PIVOT WHEEL RIDING CULTIVATOR, NO. 15.

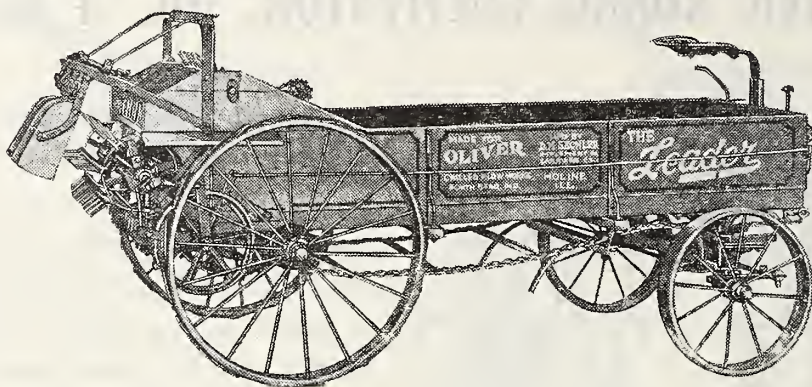


Easy to guide,
automatic balance frame,
and a
wide range of adjustments.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

OLIVER LEADER MANURE SPREADER.



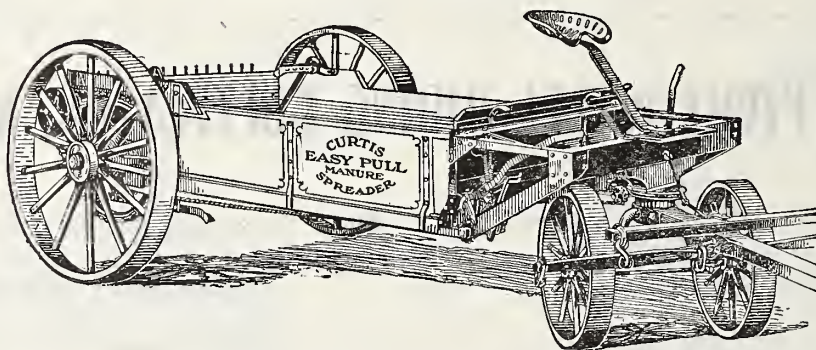
A great argument in favor of the use of any spreader is that it spreads manure more evenly than it can be done by hand. This makes the same amount of manure go further and brings the farmer greater returns from his manure. One of the important features of the Leader Spreader is the widespread attachment. Its use is to cover the tracks of the wheels, which is of special importance when spreading on slippery ground or in sticky places, because the wheels do not run over the spread manure. Another feature on the Leader is the concave, which holds the load back from the beater when loading, so that when the machine is thrown in gear the beater gets a start before the load is thrown upon it. This does away with throwing out a bunch of manure when starting the spreader and takes away the jerk on the horses and machine.

A Wonderfully Well Designed and Strongly Constructed Spreader.

Price on application.

The "Curtis Easy Pull" Manure Spreader.

MADE IN THREE SIZES.



This new spreader, the "Curtis Easy Pull," is not a departure from the "Worcester Kemp," but a logical development of it, with a new feature of breaking the load in front of the beater and consequently a saving of the pull on the horses and the strain and wear on the machine.

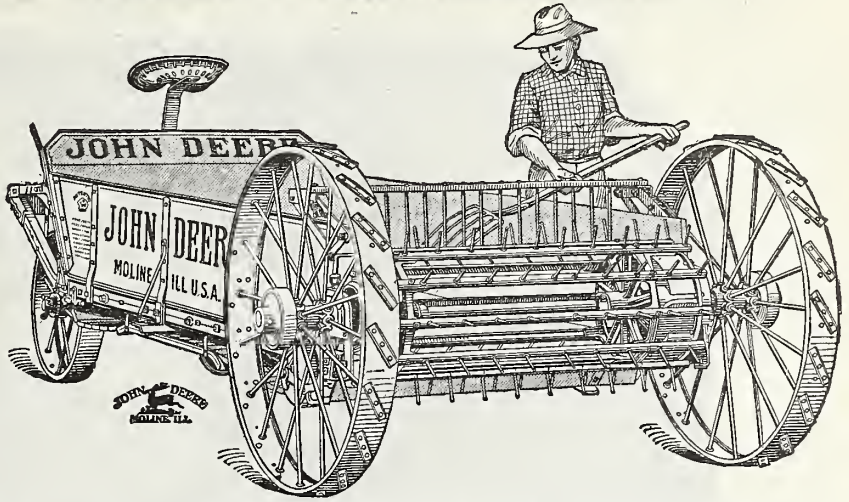
The load splits directly over the "hump in the floor" (a new feature). The beater catches it, already partly broken up. The beater does not have to tear the manure out of the load. The hump in the floor prevents the load from packing on its under side in front of the beater. The beater teeth raise the manure out and do not pack it back into the load. The load does not come up under, but comes down on to the beater. No pulverizer to prevent loading over the rear end. When loading, end gate is down; when spreading, end gate is raised and acts as a pulverizer.

Write for quotations.

Prices subject to change without notice. (See note on inside first cover.)

JOHN DEERE SPREADER.

The John Deere Spreader—the spreader with the beater on the axle—has only one-half as many parts as the simplest spreader heretofore manufactured. All its working parts are mounted on the rear axle. It has no chains, no clutches and no adjustments. Being low down, it is easy to load. The manure is taken from in front of the main axle and delivered at the rear of it. There are no clutches to give trouble, no chains to get out of line, and no adjustments to be made. All the strain and stress of spreading is borne by the axle, and none of it is transmitted to the frame or the body of the machine itself. It is simply a wagon when out of gear. Wheels at the rear of the machine do not interfere with loading. The entire side of the spreader is accessible for that purpose.

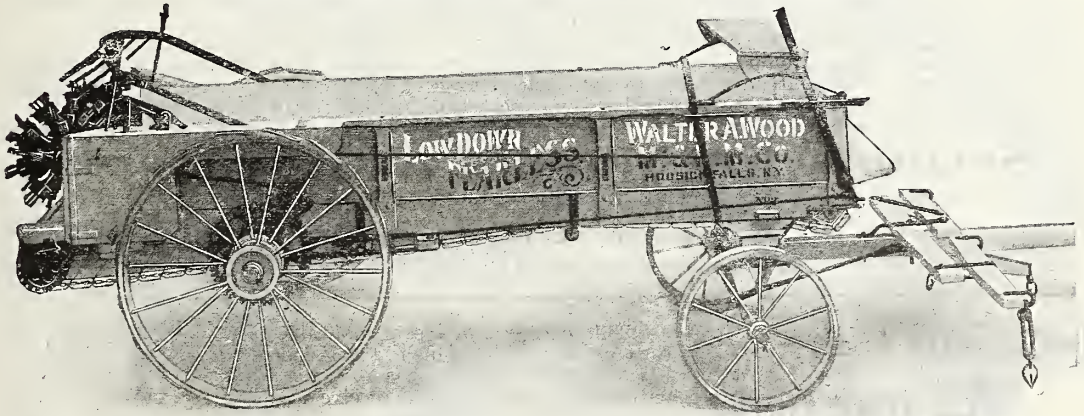


This spreader has from one hundred to one hundred fifty types of castings less than the simplest spreader heretofore made. As the machine is low down, it is only necessary to lift the manure thirty-eight inches in loading. Each forkful of manure can be placed where it is wanted, because it is possible to see into the bed at all times. Loading the spreader evenly assists greatly in insuring uniform spreading.

The John Deere Spreader is very simple—it does not get out of order and is always ready for business. Anyone can operate it.

Write for quotations.

“FEARLESS” MANURE SPREADER.



These are the reasons why you will buy a “Fearless”: Solid construction, circular beater, widest, most even spread, axles under body, low body, light draft, front truck swings under body, automatic circular rake that levels any load, two levers to control all operations, adjustable spread, ease in handling.

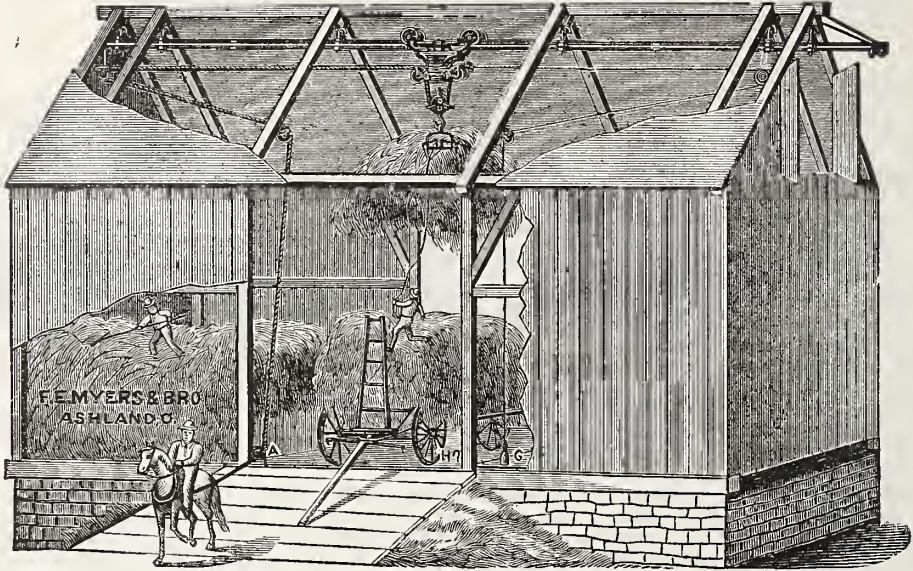
THE “FEARLESS” IS BUILT TO LAST.

The sills are of ash and oak, because they stand the strains and vibration better than steel, and are just as stiff and strong. The frame is braced at all points, so that there can be no warping or twisting and no binding of the apron to make draft heavy. The beater and beater drive mechanism are so strong that we have known the “Fearless” to spread a load of cobblestones as big as your two fists. Yet the beater is so well balanced that, with gears off, it can be turned by the pressure of your little finger. The draft is very light for several reasons. The distance between hitch and rear axle where power is taken is shortest. The apron cannot bind. The beater is perfectly balanced. The load is over the wheels, giving maximum traction. The worm drive never clogs nor springs out of alignment. The box tapers. The front and rear wheels track because the front truck is full width. The tires are wide and both rear wheels drive. Because of wide spread, the wheels never run on the last strip spread and do not slip. The beater does not attack the manure broadside. In securing low body nothing of light draft, wide spread or even spread has been sacrificed. While one or two spreaders have a little lower body, they cannot compete with the “Fearless.”

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

CUT SHOWING HAY CARRIER AT WORK.



MATERIAL REQUIRED FOR A STEEL TRACK OUTFIT FOR DIFFERENT LENGTH BARN.

FOR A 40-FOOT BARN.—One reversible carrier; 40 feet steel track; 21 hanging hooks; 21 rafter brackets; 5 pulleys; 1 fork; 6 floor hooks; 110 feet $\frac{3}{4}$ -inch Manila rope; 50 feet $\frac{3}{4}$ -inch trip rope.

FOR A 50-FOOT BARN.—One reversible carrier; 48 feet steel track; 25 hanging hooks; 25 rafter brackets; 5 pulleys; 1 fork; 6 floor hooks; 130 feet $\frac{3}{4}$ -inch Manila rope; 55 feet $\frac{3}{4}$ -inch trip rope.

FOR A 60-FOOT BARN.—One reversible carrier; 60 feet steel track; 31 hanging hooks; 31 rafter brackets; 5 pulleys; 1 fork; 6 floor hooks; 160 feet $\frac{3}{4}$ -inch Manila rope; 60 feet $\frac{3}{4}$ -inch trip rope.

Different lengths of barns will use track, hanging hooks and rope in same ratio as above.

Above estimates of rope are for an *end hoist*. In hoisting from *center* of barn less rope will be required.

When requesting quotations do not fail to give exact length of barn, whether ridgepole or full rafter, and distance between rafters. Also state whether you expect to hoist from end or center of barn.

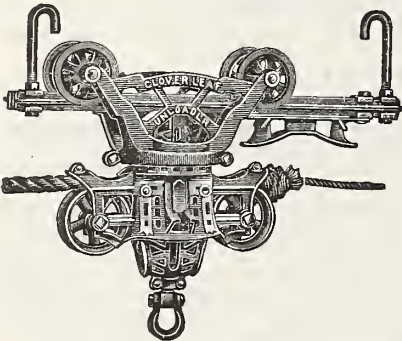
Sections for Mowers and Reapers.

Farmers may have their orders promptly filled by sending directly to us for sections for all kinds of machines.

ALL KNIVES AND SECTIONS WARRANTED.

In ordering send size of section wanted.

Myers Clover Leaf Steel Track Carrier.



This carrier is made of malleable iron throughout. Has 6-inch truck, and is heavy, and substantially made. It is fitted with wide open mouth to receive the fork pulley when approaching in any direction. Also has swinging fork pulley, which relieves the carrier from all strain when drawing hay over a high beam or into a well filled mow. The track wheels revolve on $\frac{7}{8}$ -inch turned steel axles. The rope sheaves have longer hub than any other make of carrier.



Rafter Bracket.



Rafter Bracket with Stop.

Write for quotations.

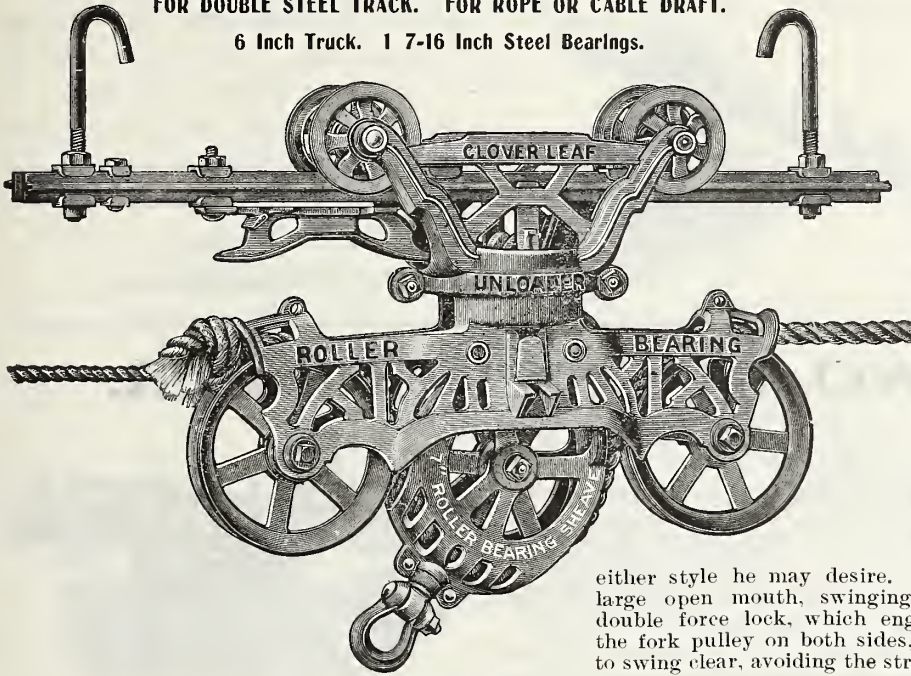
Prices subject to change without notice. (See note on inside first cover.)

MYERS CLOVER LEAF STEEL TRACK CARRIER, WITH ROLLER BEARINGS.

SWIVEL AND REVERSIBLE.

FOR DOUBLE STEEL TRACK. FOR ROPE OR CABLE DRAFT.

6 Inch Truck. 1 7-16 Inch Steel Bearings.



This carrier is made of the best annealed malleable iron, thoroughly braced, which insures strength sufficient to withstand the most severe usage. The rope sheaves are 7 inches in diameter with 1 7-16 inch turned steel bearings. This style of bearing will give more service and is easier to operate than any other style of sheave. The fact that you can use rope or cable for draft is a special feature used only on the Myers, and enables the farmer to use

either style he may desire. It is made with a large open mouth, swinging fork pulley and double force lock, which engages the frame of the fork pulley on both sides, allowing the load to swing clear, avoiding the strain.

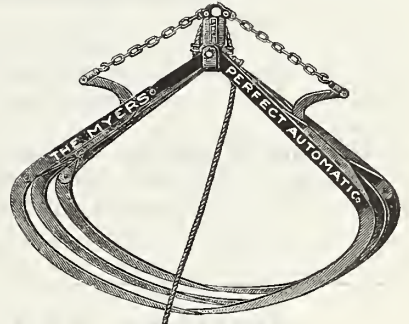


DOUBLE HARPOON FORK.

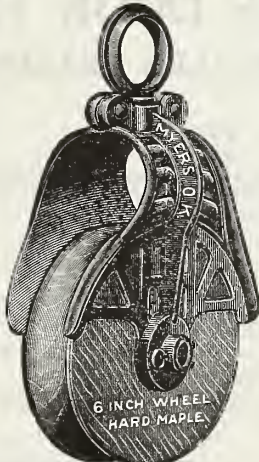
Made from wagon spring steel, which will not bend or spring out of shape.



Steel Rafter Grapple.



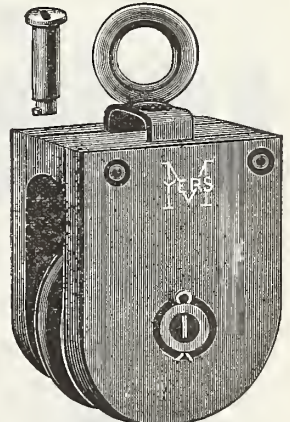
Grapple Fork.



Knot Passing Pulley.



Steel Frame Pulley.

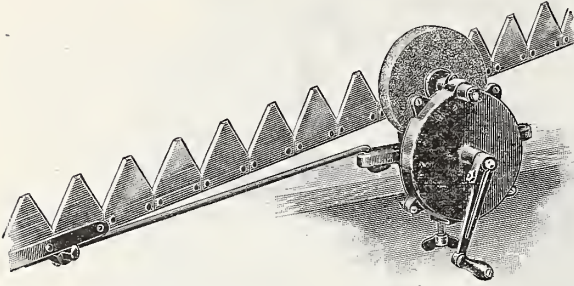


Reed Pulley, with Hook or Eye

WRITE FOR QUOTATIONS.

Prices subject to change without notice. (See note on inside first cover.)

DIMO-GRIT GRINDER NO. 86.



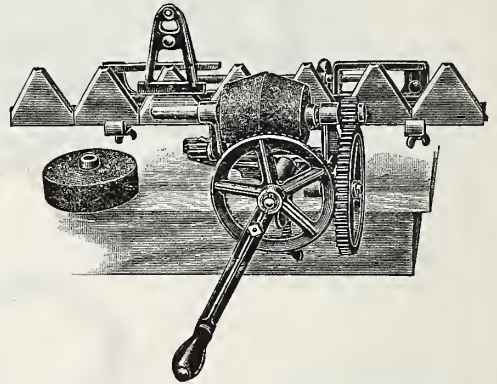
A useful farm grinder for tool and sickle sharpening. Made especially to take care of all general grinding on a farm, such as axes, scythes, chisels, plane bits, etc. This machine can be quickly attached to a mower wheel or bench and is exceptionally efficient as a general all-around farm grinder.

Price on application.

"TWO IN ONE" GRINDER.

May be handily and securely fastened to bench, table or, while in the field, to the mower wheel.

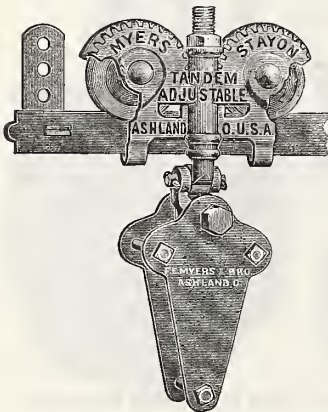
The **Mower Knife Holder** is a new type, capable of any adjustment desired, and firmly holds the mower knife with two guides or rests adjustable for any width or thickness of knife backs, and requires no change after the first adjustment; the spring clamp allows shifting of the knife to any position while grinding. The entire weight of the knife is carried by the holder, and the operator has full view of the work, and easily controls the pressure and governs the grinding of nicks, gaps and any width or length or bevel without stopping for readjustment of any kind. Are equipped with vitrified carborundum grinding wheels, the hardest, sharpest and fastest cutting abrasive known.



Grinding Wheels can be changed by removal of one cotter pin. The knife holder answers for a tool rest, and is made rigid with lug and bolt, as shown in the illustration, with straight face wheel, and thus meets all requirements for general grinding, such as axes, chisels, etc.

Price on application.

MYERS FLEXIBLE DOOR HANGER, WITH STEEL ROLLER BEARINGS.

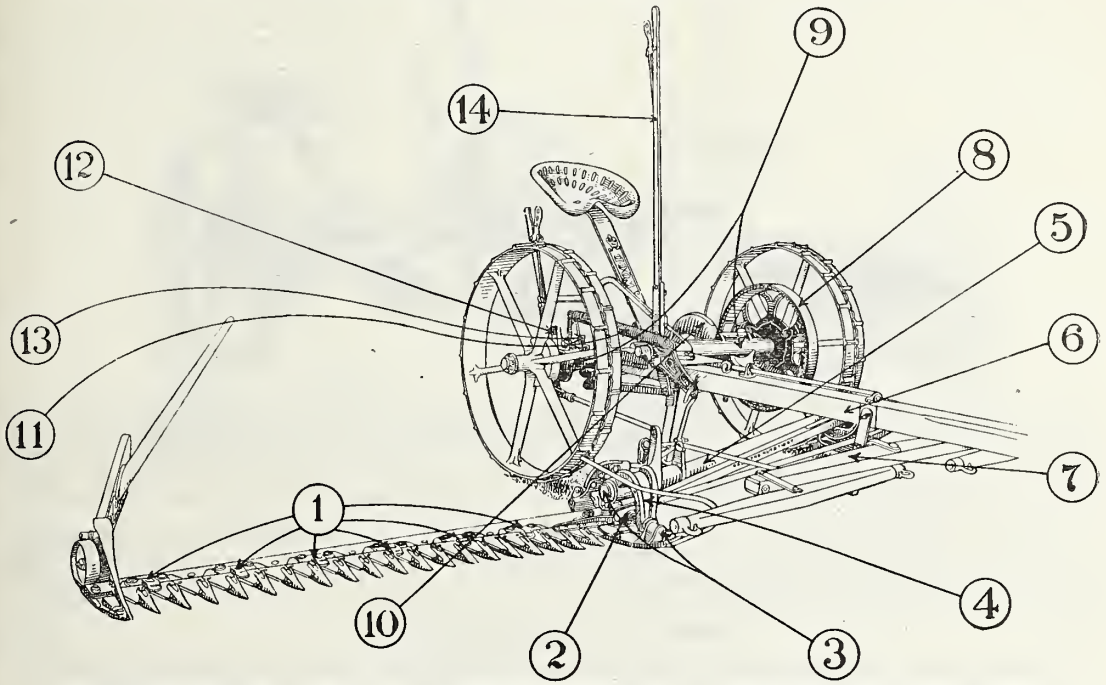


This is the only hanger on the market that can be adjusted perpendicularly so as to locate the door at any point above the ground, or laterally so as to adjust the door to or from the building, and will also adjust itself to any thickness of door. The perpendicular and lateral adjustments are made with an ordinary wrench, and at the will of the user. The cut represents the face view of the hanger, showing the manner in which the wheels are most completely covered, also the bracing of the frame.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

THE WALTER A. WOOD NO. 2 VERTICAL LIFT MOWER.



The performance of the Vertical Lift Mower in the field during the seasons of 1917-1918 proved beyond doubt that this is the most perfectly constructed, most perfect running mower ever put on the market by any concern. Although before the trade only three years, the demand for the Vertical Lift nearly equalled that for the famous Admiral line of mowers which has been manufactured for many years and the sale of which has attained very large proportions in all parts of the world. Wherever the Vertical Lift was introduced in 1915 the demand in 1916 far exceeded all estimates. This demand continued so far toward the end of the season that the manufacturers were unable to build enough machines in time to supply all of their customers. This, in our opinion, is a very striking indication of the way the Vertical Lift satisfies its users and increases in popularity wherever introduced.

No. 1. Maximum number of sickle holders to hold knife to ledger plates.

No. 2. Large size ball and socket for knife head and for lower end of pitman.

No. 3. Large 24mm pins for bar turned to an accuracy of 1-40mm.

No. 4. Heavy cast iron "hanger." Will not bend.

No. 5. "Drag bar" is of heavy high carbon steel. Will not bend.

No. 6. Balance wheel adjusted accurately to prevent vibration of machine.

No. 7. Hitch is perfectly balanced so that there is no neck weight on horses.

No. 8. Internal drive gear of perfect mechanically moulded teeth. Runs quietly and with little friction.

No. 9. Main axle bearings are rollers.

No. 10. At rear of mower the bevel gear is adjusted by a screw held by lock nut. Thrust of gears comes on a glass-hard iron thrust disc.

No. 11. One balance spring does all the work of exactly balancing outer end of cutter bar, inner end of cutter bar and frame. Pole can be detached from frame without taking off spring.

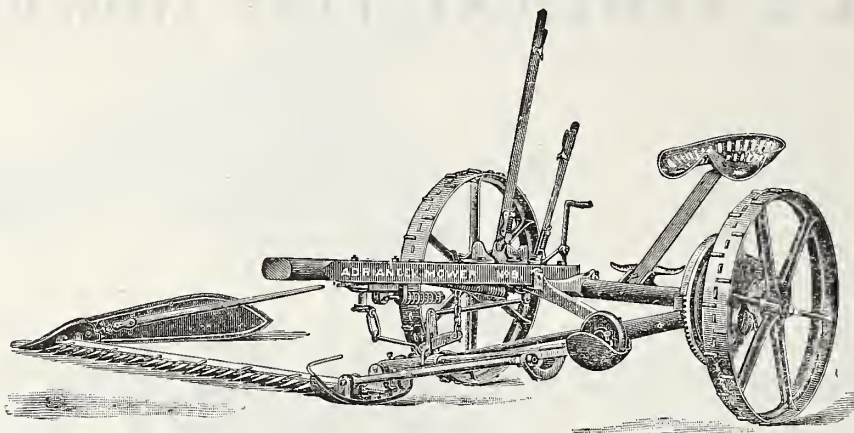
No. 12. Tilt quadrant rigidly fastened to frame. Will not come loose and destroy tilt.

No. 13. Large set screw tightens balance spring and takes weight off of the foot lever.

No. 14. Bar can be raised to vertical position with hand lever. Simple automatic roller cam disengages clutch.

Prices subject to change without notice. (See note on inside first cover.)

THE ADRIANCE MOWER.

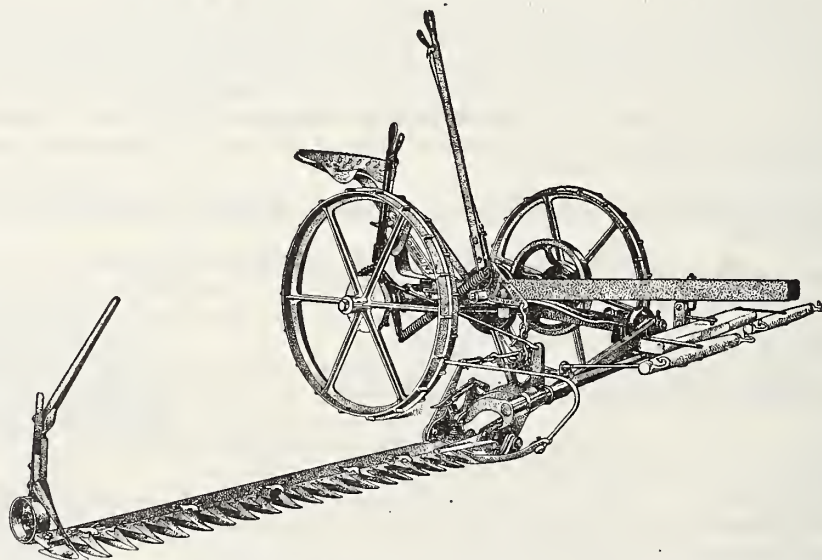


The accompanying illustration shows the **Adriance** Mower as built for 1919, and with its modern construction and perfection of design, contrasts sharply with the earlier models of the **Adriance**. While these old-time machines (the first of which was built in 1858 and which was still running in 1901, and the second which was built about 1865) are widely different in appearance, having the heavy oak frame and the wooden wheels, yet the underlying principles of the construction of the **Adriance** Mower have been the same since its invention in 1855.

The first mower was built with the square-cut gears, which were later supplanted by the internal gears, quite similar to those still in use. The floating bar with the coupling hinges in line with the crank shaft was the most notable feature of the **Adriance** Mower of 1885 and is to-day one of the most important features found exclusively on **Adriance** machines.

Write for quotations.

THE NEW OSBORNE MOWER.



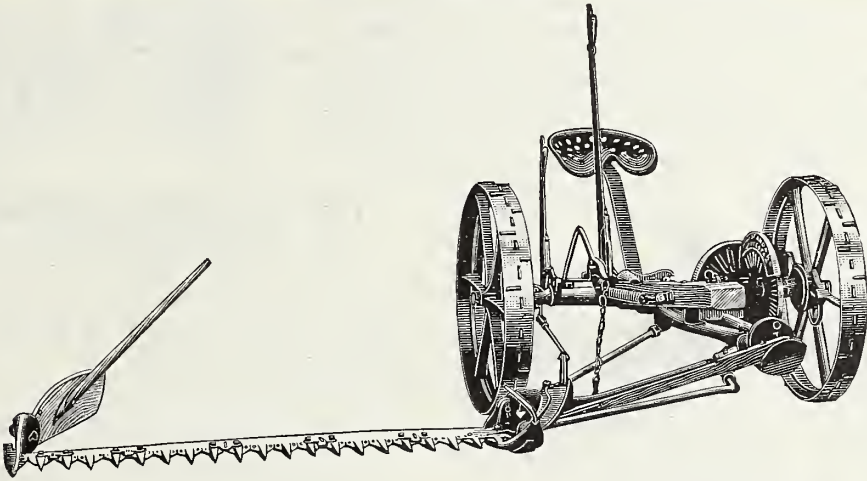
The New Osborne Mower has made a place for itself in the front ranks of grass-cutting machines. Each detail that means much to the farmer has been worked out with care, and the result is a perfect machine in every respect. Wide frame, broad-faced gears, and a foot lift that raises the cutter bar high above every obstruction, are a few of the valuable features. The draft attachment should not be overlooked when comfort for the team is considered. Made in all sizes, plain and vertical lift.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

The Worcester Buckeye Mower.

EASY TO HANDLE, LIGHT DRAFT, QUIET RUNNING, LONG WEARING.



ONE HORSE.
4-foot cut.

TWO HORSE.
5-foot cut.
6-foot cut.

These mowers are made in three sizes. The one-horse mower is the smallest, but is designed just right to carry a 4-foot cutter bar. The 5-foot is a broad and strong mower, carrying the bar steadily. The 6-foot is a very broad frame, heavier than either of the others, and extra strong.

The Worcester Buckeye is sold everywhere in the east and is popular wherever it is sold, but it was first built for Maine and Massachusetts. It is particularly well made. Runs like a watch. Try one of the new ones, and you will be convinced.

Price on application.

THE BULLARD HAY TEDDER.

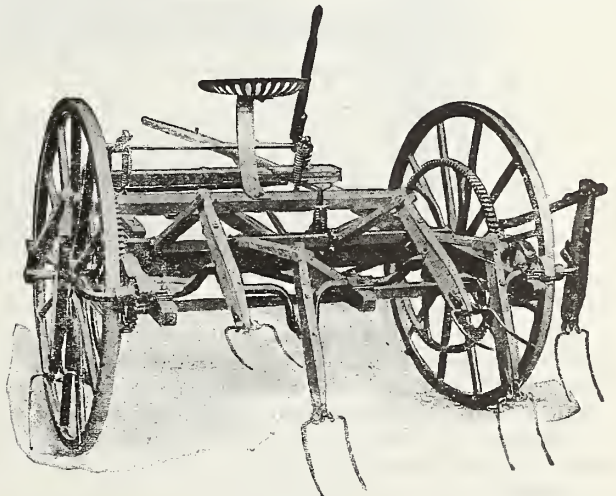
Takes the hay up from the bottom, shakes it in the air and leaves it lightly on the ground for the sun and air to complete the work of hay making. Does not shake to pieces. Is elastic but tough.

The crank shaft split in the middle makes it easy for the horse to turn.

Two tension springs on the tilting frame, together with the new Mudgett fork springs, prevent breakage of wood arm.

The forks on either side are driven independently by the wheel nearest them, so that this tedder can be turned while it works, without straining the tedder or horse, and do good work all the while.

If you want to get a tedder that will do its work in the right way, with the least fuss and bother, and that gives you the most lasting satisfaction, buy a **Bullard**.

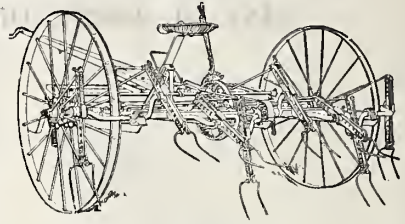


Price on application.

Prices subject to change without notice. (See note on inside first cover.)

THE WALTER A. WOOD TEDDER.

The Wood Tedder is built very strongly and substantially. Its construction will withstand all the jar and strain caused by the rapid motion of the fork arms. Strong springs absorb the vibration so that it does not reach either driver or team. Power is transmitted by chain and sprocket from the main axle to the fork arms so that the mechanism works smoothly and evenly. The motion of the forks has been so timed as to toss every bit of hay. Outside forks toss the portion just passed over by the wheels. It is equipped with roller bearings in the places where friction would be most likely to occur.



THE WALTER A. WOOD RAKE.

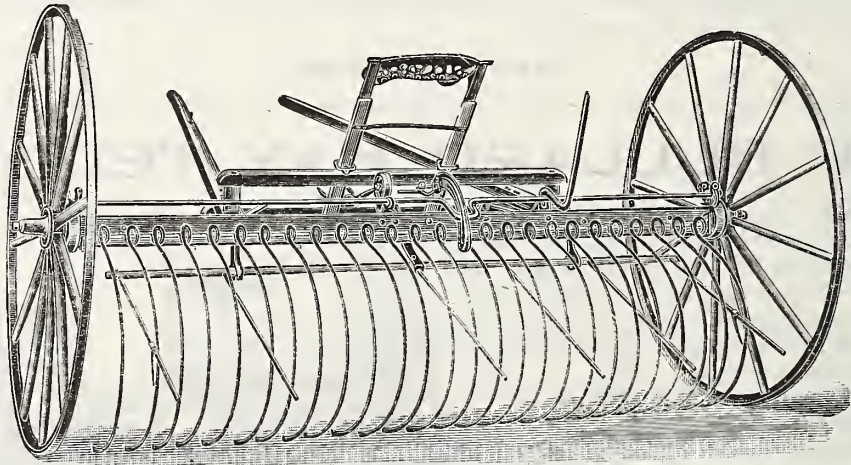
Will do the work better, rake cleaner and dump more accurately than many other rakes on the market. The teeth lie 8 inches to 10 inches on the ground—every bit of hay is raked. The Wood Rake never spills the hay at the ends. Everyone needs a rake that he can depend on at all times to do the work right and to stand up under the constant wear and tear of work in all kinds of fields. If you have had any experience you know that there is no economy in buying a cheaply made, nicely painted machine that soon

breaks in important parts or racks itself to pieces in a season or two. The only really economical rake has a long life, and that is why we offer the Wood Rake. Its strong and substantial construction assures you a service of many years.

Prices on application.

THE "GENUINE" NEW YORK CHAMPION HAY RAKE.

EITHER IN WOOD OR STEEL. STRONG, SIMPLE AND DURABLE.



That these rakes are **standard** is shown by the heading. A "**Genuine**" New York **Champion** means to many thousand farmers **the standard of all rakes**—one that is always in perfect condition whenever it is wanted. It cleans the ground thoroughly without taking up dirt, and works with ease and convenience, in heavy or light crops, on level fields or hillsides.

The teeth. Oil tempered, flat pointed (sled-runner shape), interchangeable (no rights and lefts).

Cleaners are steel, diamond shaped, securely bolted to steel pipe. They pack the hay as the teeth fill and keep it from rolling.

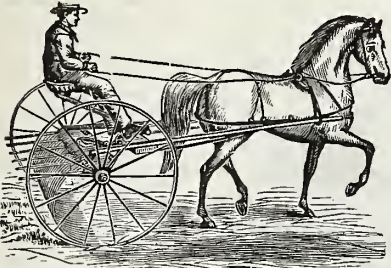
Dumps with one-piece rod from both wheels at once—this makes even draft. Levers, hand and foot, give the driver control at all times.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

THE YANKEE HORSE RAKE.

SOME OF THE LEADING POINTS OF SUPERIOR EXCELLENCE FOUND IN THE YANKEE HORSE RAKE.



Simplicity in construction and excellent quality of materials.

Adaptability to rake anywhere, whether the fields are rough or smooth or the hay green or dry.

Rake head adjusted so as to balance the weight of the teeth.

This device completely prevents the teeth from dragging heavily and digging into the ground or filling the hay with dirt and dust.

Teeth run level with the ground at their points.

Each tooth is perfectly independent in action and supplied with a yielding spring that will allow it to pass safely over any obstruction that the axle can pass over.

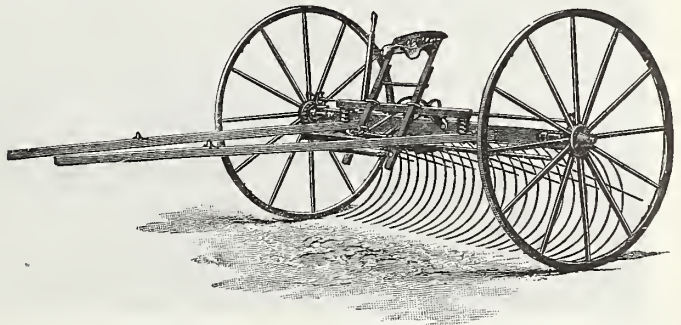
Price on application.

THE "K. & W." HORSE RAKE.

THE WAY THE RAKE YOU BUY OUGHT TO BE MADE.

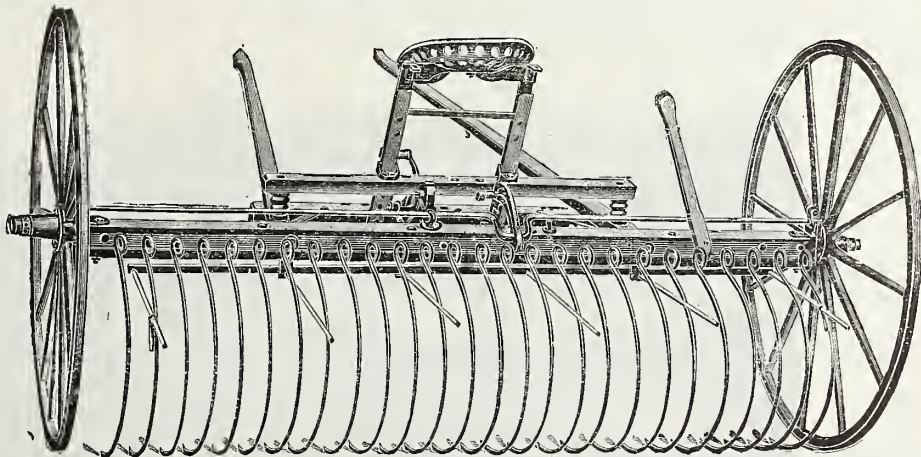
Wood construction, braced at every corner, steel truss rod under the axle bed, highest grade of material used throughout. Light but strong and will outwear any other rake. Sled-runner teeth, with a coil loop near the upper end. Rakes clean everywhere, but does not dig and never injures the grass roots. Not one new tooth furnished in a hundred sales. This rake will not roll hay. Any boy can handle it.

Price on application.



THE NEW YORKER RAKE.

A RELIABLE WOODEN RAKE.



Certain sections of the country demand a model of this character, and for those who prefer this style we recommend the New Yorker Self-Dumping Rake shown here.

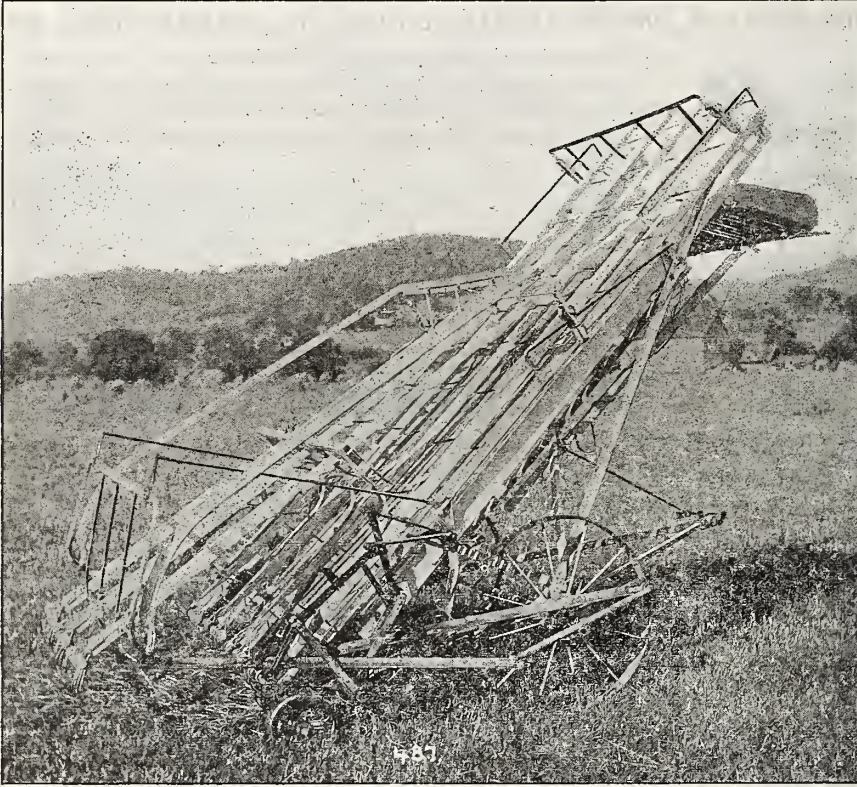
The rake is so nicely adjusted that you need but touch the foot lever to release the rake and allow it to dump.

Strongly made, durable and practical; a dependable rake in every particular.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

The Walter A. Wood Gearless Hay Loader.



In this new loader we have what we consider the latest and best gearless loader that has been designed up to the present time.

This loader is being placed on the market in a commercial way this season for the second time, and has been given a thorough trial in actual working conditions in the hay field during the past three seasons, during which time it has been submitted to many severe tests, and has proved itself to be a most successfully working machine, both in the class of work it does and the way it does it.

Many people who are thoroughly acquainted with the performance of other makes of loaders have witnessed this loader in operation under every possible kind of conditions and all have pronounced the Wood to be the most perfect working loader they have ever seen. We confidently recommend the Walter A. Wood Gearless Hay Loader to all of our customers as a machine that will give them the best of satisfaction.

The Walter A. Wood Cylinder Side Delivery Rake.

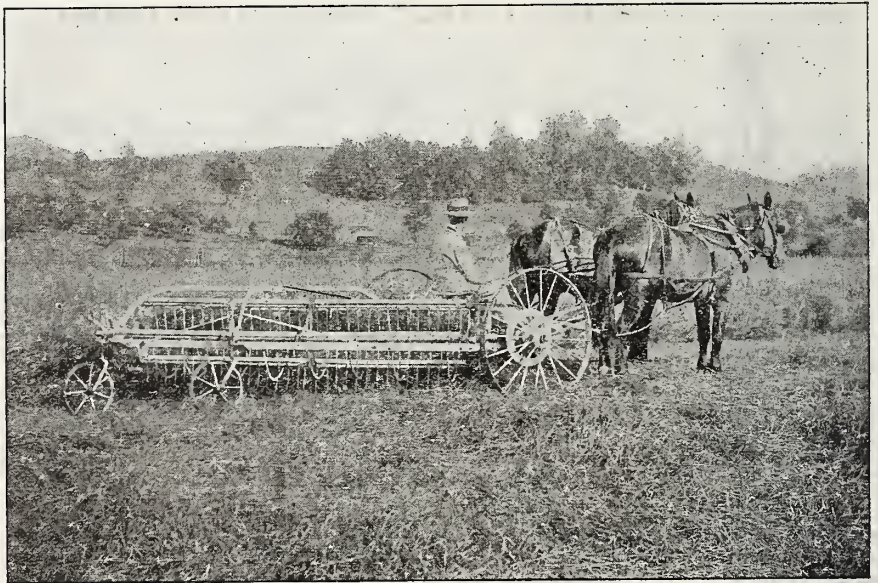
This is a machine that we are cataloging for the second time. It has been given a most exhaustive trial in actual working conditions for the past three seasons, and the tests to which it has been submitted during this trial period were perhaps more severe than the average work it will be called upon to perform by those who buy it, thus proving that the Wood Side Delivery Rake is worthy of a place in the famous Walter A. Wood line of machines, and we heartily recommend it to everyone who is in the market for a machine of this kind.

This Cylinder Side Delivery Rake combines strength, durability, light draft, ample power, and efficient working qualities. It is adjustable to the different conditions that are encountered in the hay field so that it can be made to do good work at all times.

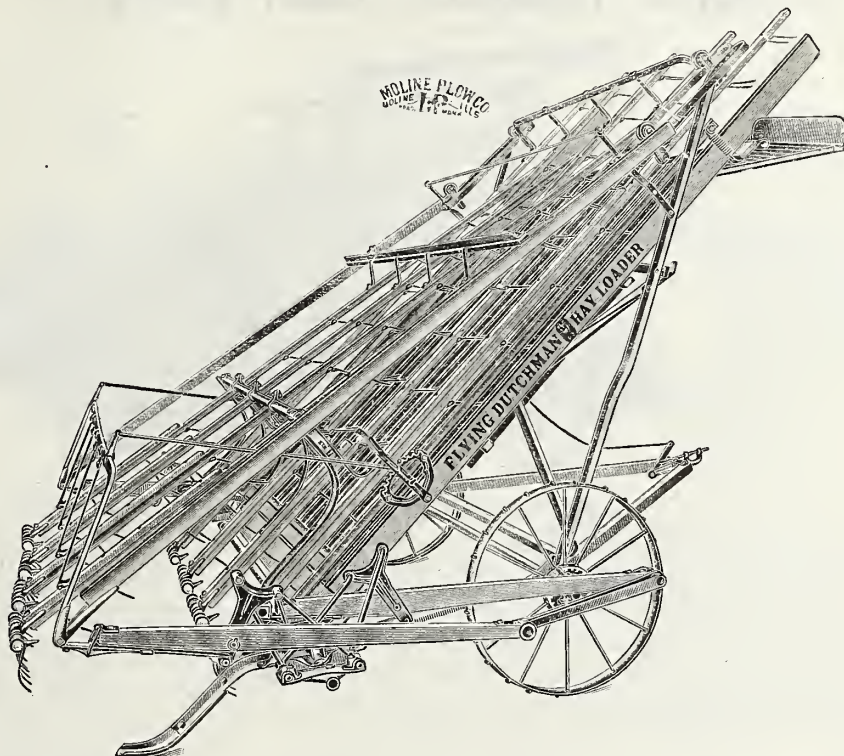
It is a machine that will give long, satisfactory service and therefore it is a machine that will yield good dividends as an investment.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)



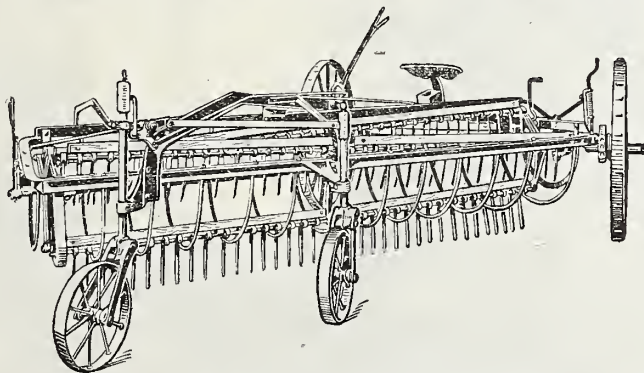
FLYING DUTCHMAN HAY LOADER.



This loader handles, without adjustment, either the lightest swath or the heaviest windrow. The yielding deck, held by strong springs, accommodates either heavy or light crop. It is a "one man loader." With it anyone who can drive a team can go out to the meadow and bring in a load of hay. It has no cams, webs, drums, chains, sprockets, gear wheels, and no "delays." It is the most simple, direct and positive, and the most durable loader on the market.

Price on application.

MOLINE CYLINDER SIDE DELIVERY RAKE.



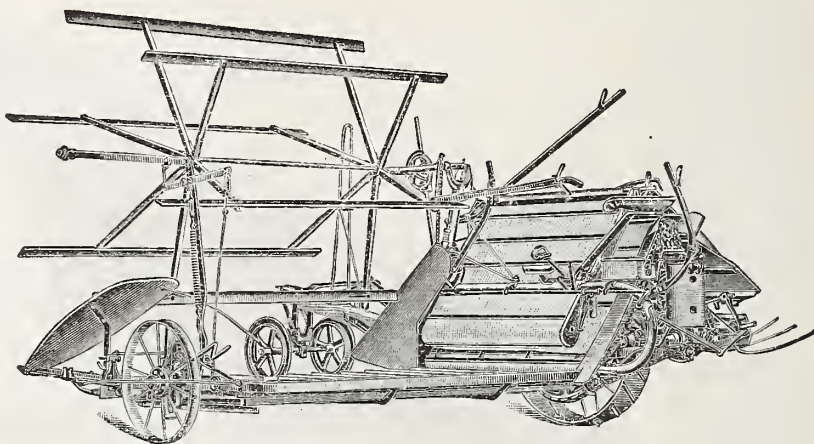
Gears are strong and durable. Power is derived from both main wheels, which are of steel of the most approved and up-to-date type. Strippers for the teeth are made of spring steel so that they will maintain their correct shape and position. A three-bar raking cylinder, carried by a heavy pipe axle, with the bars supported in the middle. By moving a lever the teeth may be set at any angle desired. A comfortable spring seat is provided that places the driver where he may easily operate the rake. This machine is a decided step in advance of any cylinder rake on the market. It is of all steel frame construction, well braced and made strong in all its parts, and is adapted for all kinds and conditions of hay.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

MOLINE (ADRIANCE) GRAIN BINDER.

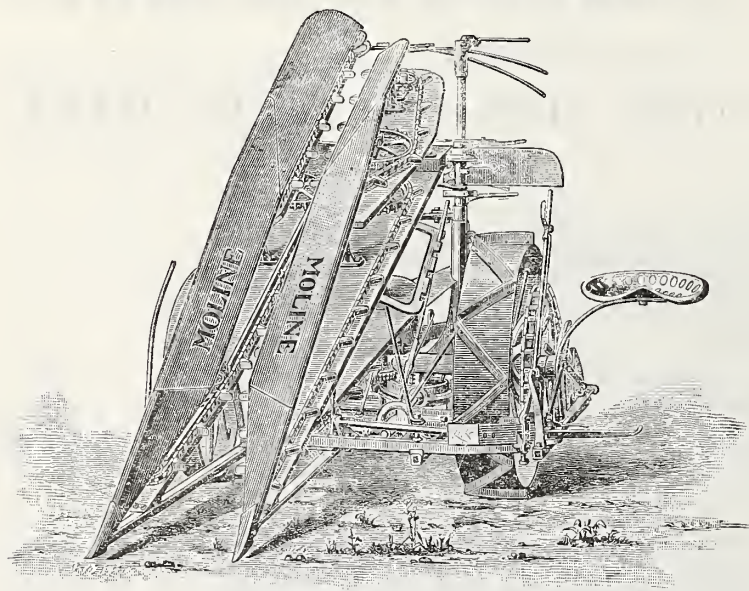
A binder is made up of many parts, some structural, some operative. Weakness in any one of these parts will immediately cause trouble with the entire machine. In general appearance, binders of the various makes are all very much alike. They all work more or less satisfactorily, especially when new and under favorable, or even ordinary, conditions. In the selection of a binder, the prospective purchaser should consider these



points: Is the machine well built and strong enough to stand the hard usage I shall be obliged to give it? Has the matter of light draft been given full consideration? Will my team be able to handle it with ease? Is its mechanical construction such as to satisfy me that it is able to handle not only light standing grain, but heavy and lodged grain as well? Is it simple and easily taken care of? We shall undertake to answer these questions by calling attention to the details of the construction of the **Moline (Adriance) Binder**.

To be superior to all other binders, it was necessary to build the **Moline (Adriance)** more carefully, of finer materials, in more perfect proportions, with more rigid inspection, combined with a thorough knowledge of the conditions to be met in harvesting all kinds of grains in all sections of the country. The **Moline (Adriance) Binder** is the result of sixty years of continuous experience in building harvesting machinery. It has been sold extensively in foreign countries, where operators are unskilled in the

MOLINE ADRIANCE CORN BINDER.



use of machinery; where repair shops are few and far between. In countries so distant that an expert could not be sent, **Moline (Adriance) Binders** have given such satisfactory service that the number in use has increased annually by leaps and bounds. This great increase is not due to any one particular feature of merit, but to its superiority in every way. The test of a machine is not in one season's use in standing grain of average height, but it is in the years of service—in extremely tall or short grain and under adverse as well as favorable field conditions. In short, the **Moline (Adriance)** contains all the points of merit known in the construction of corn and grain binders, as thousands of satisfied farmers can testify.

Write for complete descriptive catalog.

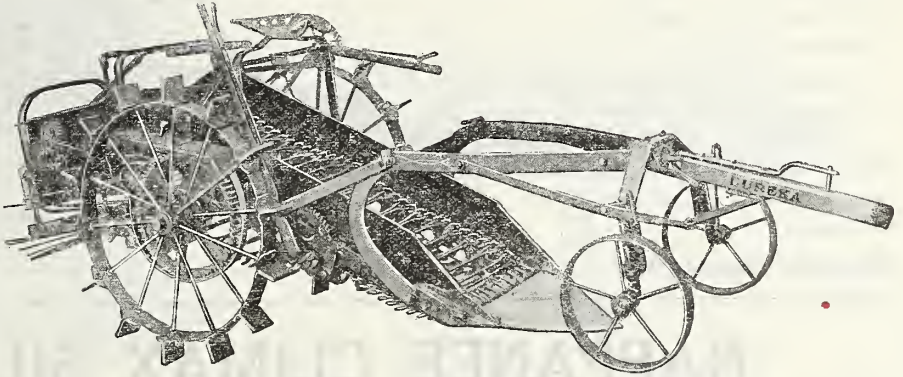
Prices on application.

Prices subject to change without notice. (See note on inside first cover.)

No. 65. EUREKA POTATO DIGGER.

Has few parts and long life. Steel and malleable construction. Low cost for repairs and less delay in the field.

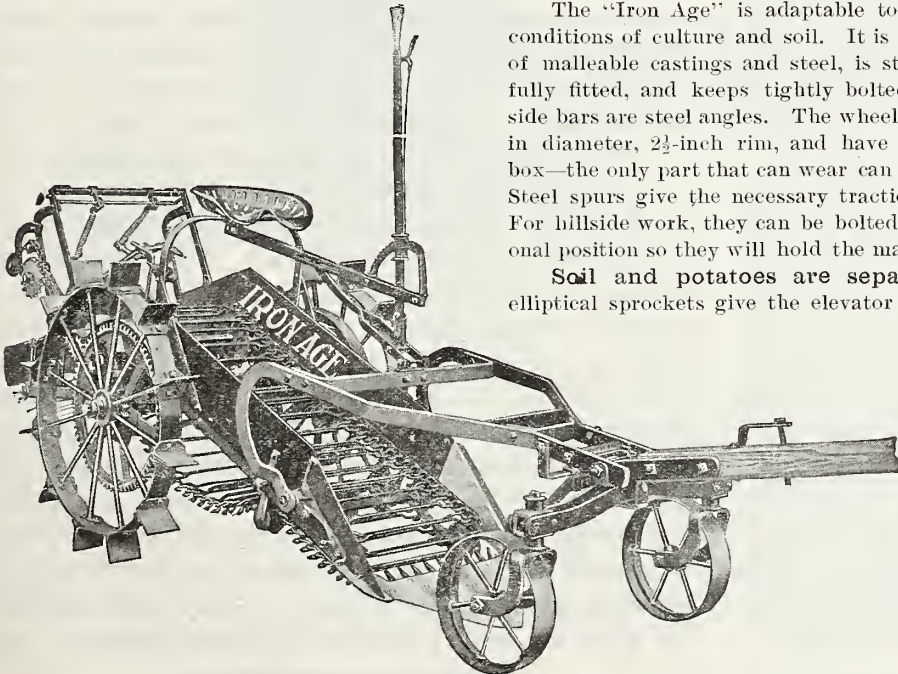
The main frame is made of high carbon steel bars, held in proper alignment by the several cross shafts and the shovel connections. The body pieces are heavy sheet steel. Malleable iron and steel are very largely used throughout, making unusually neat and strong construction, and reducing repair cost to a minimum.



The Eureka has large capacity and will do good work in heavy or light conditions. The shovel and elevator are 22 inches wide. The elevator is 5 feet long, is made of 7-16 inch high carbon steel rods and is supplied with effective agitators. A series of spring steel tines provide ample agitation at the rear of the main elevator. The motion of the shaker is a distinctive Eureka feature and lessens power and draft. The potatoes are placed in a narrow row, reducing the labor of picking up. The vines and weeds are turned to the side and are not deposited on the potatoes. The pivotal front wheels permit a very short turn. The connections with the pole and frame provide for liberal movement in all directions. The wheels automatically adjust to uneven ground and pass over obstructions without affecting the depth of shovel. The machine can also be backed. Neck yoke and four horse eveners are supplied, although two horses will handle the digger in many conditions.

Price on application.

IRON AGE POTATO DIGGER.



The "Iron Age" is adaptable to a wide diversity of conditions of culture and soil. It is built almost entirely of malleable castings and steel, is strong, compact, carefully fitted, and keeps tightly bolted. The main frame side bars are steel angles. The wheels are steel, 28 inches in diameter, 2½-inch rim, and have cast removable hub box—the only part that can wear can be cheaply replaced. Steel spurs give the necessary traction for level ground. For hillside work, they can be bolted to the rim in a diagonal position so they will hold the machine from slipping.

Soil and potatoes are separated thoroughly—elliptical sprockets give the elevator apron just the right

automatic movement. The shaker completes the separation. The elevator chain (apron) consists of interlocking cross bars of steel, has no unnecessary tension, and is driven direct by gearing from both main wheels.

Price on application.

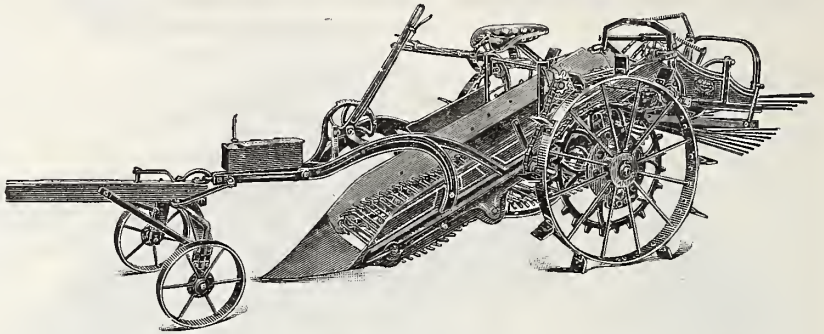
Prices subject to change without notice. (See note on inside first cover.)

The Hoover Potato Digger.

A digger built on the right principle to do good work, and with years of experience to prove it.

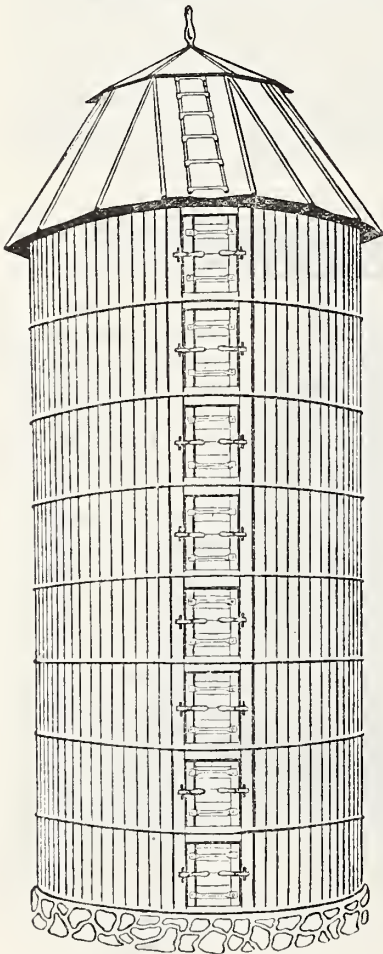
The shovel, elevator and vine separator are especially constructed to make the Hoover one of the most perfect working diggers on the market.

Price on application.



NAPPANEE CLIMAX SILO.

**WORLD'S BEST LUMBER USED IN ITS CONSTRUCTION,
OREGON FIR AND LONG LEAF YELLOW PINE.**

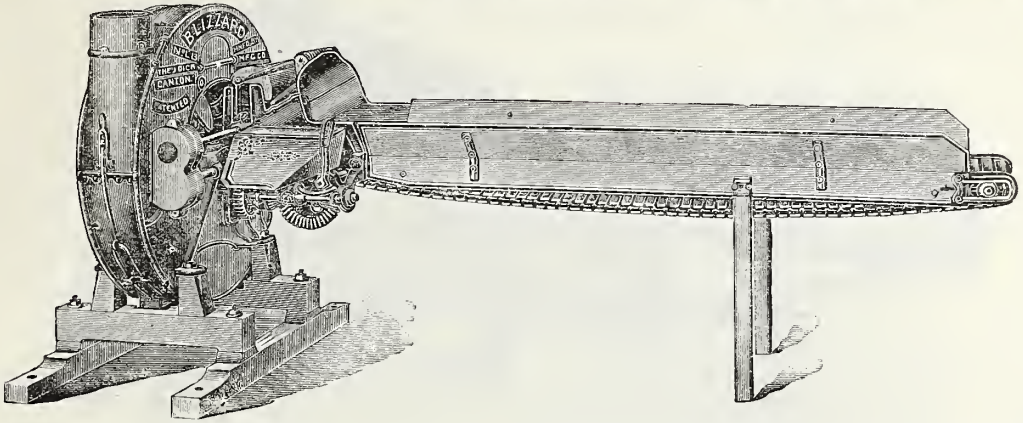


Every feature that enters into the make-up of the Climax Silos is given careful consideration, even to the small details. The doors are bolted on to the cleats instead of being nailed. This makes a solid construction and one which will keep the doors in perfect condition, even if they are subjected to a great amount of abuse. Between the door and frame there is a layer of felt packing and this insures an air-tight joint. The levers for clamping the doors in place have a great amount of purchase and the construction is of such a nature that no end of leverage can be secured. The perfect ladder construction is a winning feature and the heavy rungs which are used in the construction are made from fourteen gauge steel, pressed into a circular shape by most powerful machinery, giving great strength to the entire construction. The cross pieces between the uprights are flush with the edges on the outside of the silo and on the inside overlap and are bolted to the uprights, thus being uniform with the doors. In order to make a lap at the top and bottom for each door, the inner cross pieces are made one-half the width of those on the outside. This makes an individual opening for each door and the doors are interchangeable. The frame in the Climax Silo is beveled to correspond with the circle of the silo so that when the hoops are applied there is an even tension at all points. The hoops are held in position with special staples.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

"Blizzard" Ensilage Cutters and Blowers.

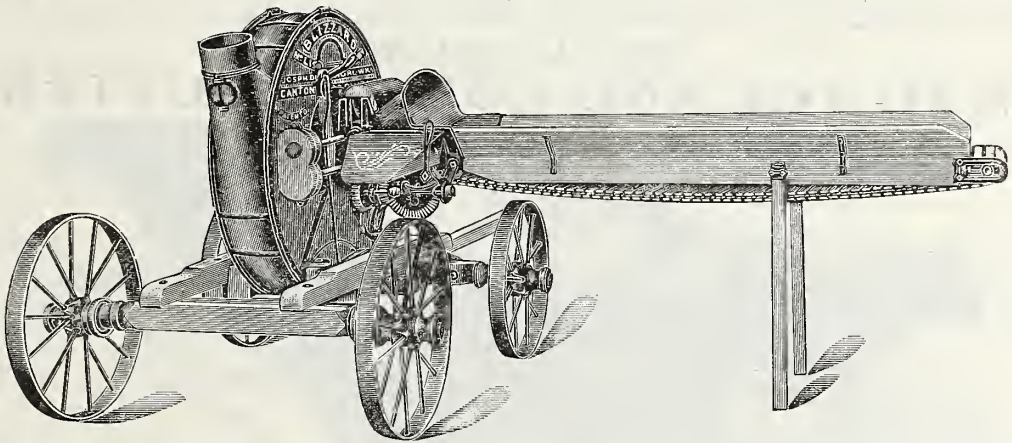


The use of silos and the feeding of cut fodder have grown apace as the result of scientific investigations proving the value of these methods, and the question of what kind of a silo is best to build has many advocates for and against certain styles, but the decision of *what cutter* to use admits of no dispute.

It is evident that a cutter which works steadily, takes whatever is fed to it without a hitch, and is so built that it outlasts any machine of its kind, is the most profitable machine to buy.

The "Blizzard" is that kind of a machine, built for endurance and satisfaction-giving, not merely slapped together to sell; is substantial all the way through, and the parts you *can't* see are as carefully made and of as good material as those you *can* see.

The Self-Feed Table enables it to eat up green or dry fodder with astounding rapidity and with very little attention from the operator. It practically runs itself.



The Improved Wind Elevator not only elevates any height and in any direction, but distributes the cut feed evenly inside the silo.

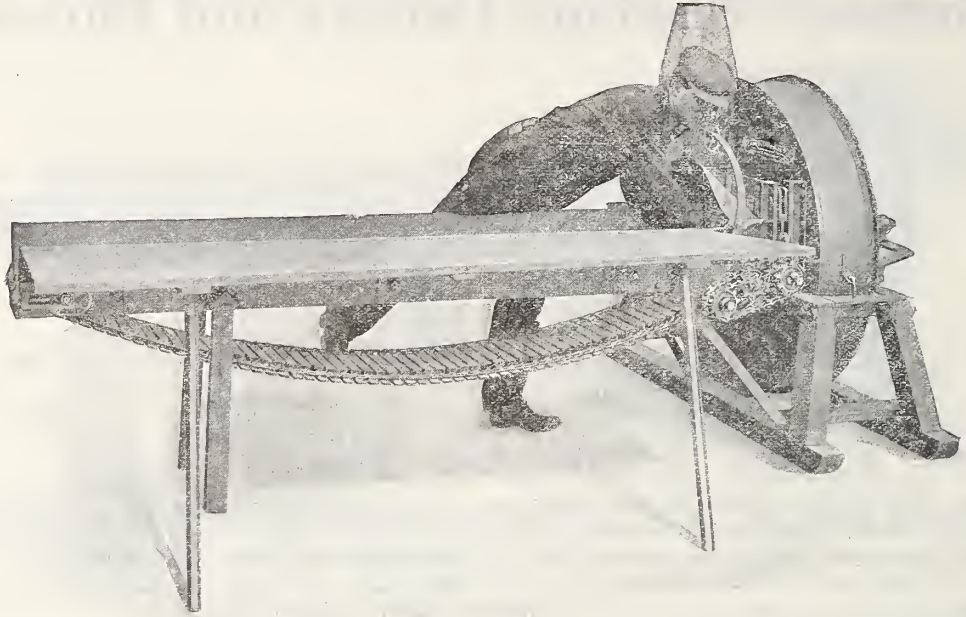
The knives of the "Blizzard" are extra strong, and the special feature which will appeal to user is that they may be adjusted to or from the shear plate while the machine is running at any speed; also every "Blizzard" Cutter is tested out at a speed and under conditions 50 per cent. greater than is ever called for in actual use.

All the very latest improvements are embodied in these machines. They are built for business, sufficiently strong in all parts to withstand the wear and tear of any amount of work required. Each size is carefully proportioned, so that whether you buy a small or large size you are sure of getting an ensilage cutter that will do all we claim and all that could be desired. The "Blizzard" is a satisfactory machine to buy and a more satisfactory machine to use.

Complete descriptive catalog and price list on application.

Prices subject to change without notice. (See note on inside first cover.)

"MONEY MAKER" ENSILAGE CUTTER AND BLOWER.



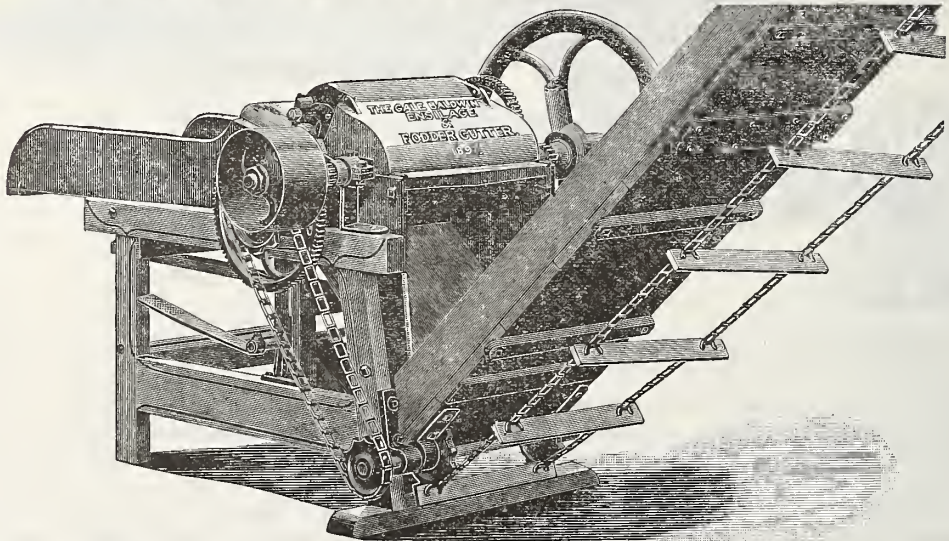
Cutter knives are straight, the most efficient and strongest type in use. The parts which hold the knives are of malleable iron. Knives are adjusted to cut close and clean like shears blades.

The fan wings are four in number, and are made from malleable iron. Discs, knives and fans are all contained in the fan case.

Discs 34 inches in diameter, 1 1-2 inches thick.

Price on application.

THE GALE-BALDWIN ENSILAGE AND FODDER CUTTER.



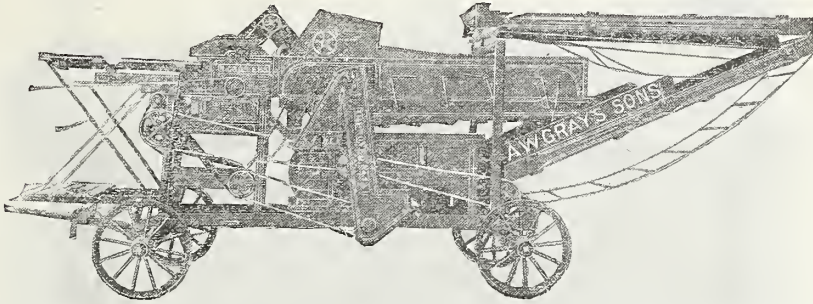
A very successful machine made for light power, and one which is easy to feed, easy to keep in order, and is very durable. Cuts with great rapidity hay, straw, corn stalks, ensilage, etc., and the improvements lately made have proved to be exactly what was needed to make this machine one of the most perfect and easiest working ensilage and fodder cutters.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

Gray's New Thresher Nos. 305-306,

WITH TAILINGS ELEVATOR, BAGGER, STACKER, ETC.



This thresher has been remodeled and reconstructed, and while built along the lines of regular threshers a number of radical changes have been made, one of the principal ones being that it is arranged so that it commences to separate the grain from the straw as soon as it leaves the cylinder, thus meeting the special benefit claimed for the undershot threshers.

It is built especially to meet the demand for use with gasoline engines, is made with 18 x 30 cylinder, but two different sizes of separators have been added to admit using different size engines and are numbered 305 and 306.

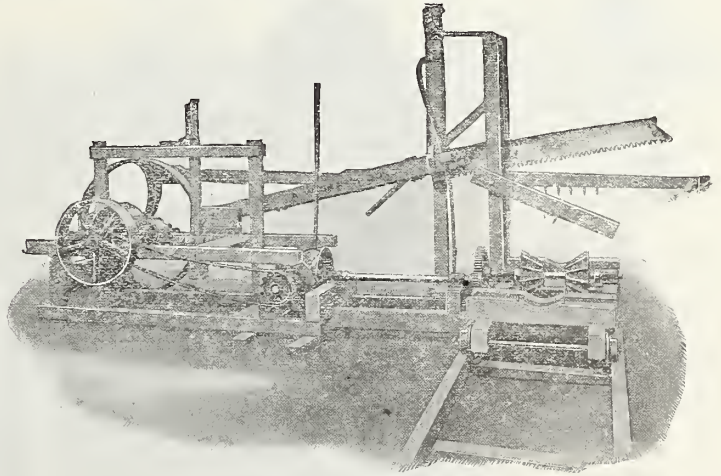
Price on application.

GRAY'S INDEPENDENT DRAG SAW MACHINE.

FRICITION DRIVE,
to run by Engine or other Power.

This is the latest and best drag sawing machine on the market.

One of the most important points in using the drag saw is to be able to start it slowly, thus removing any danger of breaking or bending the saw, and this is accomplished perfectly by using the friction transmission. Another feature is to be able to stop instantly, and this is arranged for in this machine as the moving of the break lever releases the friction pulley, at the same time

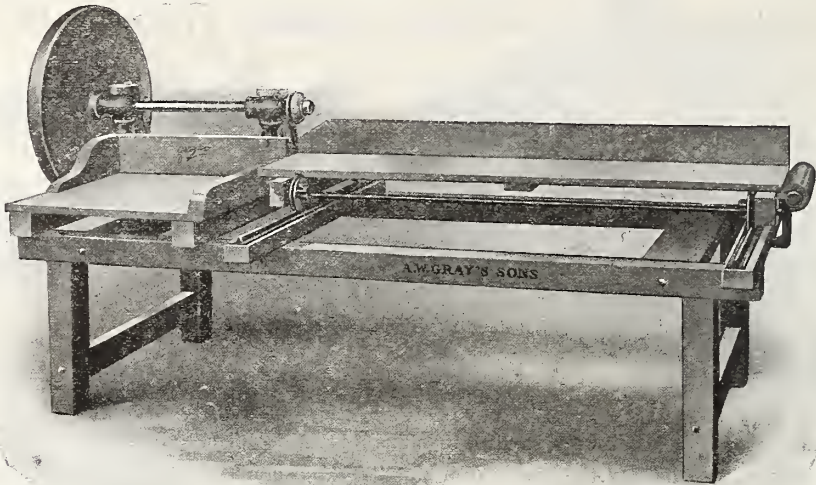


applies the brake on the balance wheel, thus stopping the machine instantly. By changing the size of the driving pulley on the counter shaft, these machines may be adapted to almost any style of power.

Price on application.

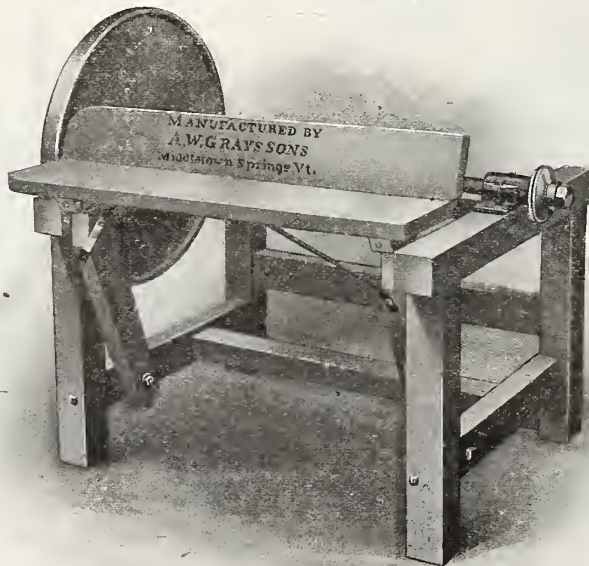
Prices subject to change without notice. (See note on inside first cover.)

GRAY'S CIRCULAR POLE SAW, WITH SLIDING TABLE, NO. 5.



There is a demand for moderate priced machines of this style for sawing poles or cord wood into stove lengths, or shorter. Owners of wood yards and those who have odd jobs can use them. If you have enough work to pay we recommend our sliding table machines. They are more easily handled, more durable. The sliding table has a roller at one end for convenience in handling long poles, and on all saws the balance wheel and pulley are interchangeable. These machines are equipped with either 24, 26, 28 or 30 inch saws, each frame being adapted to either size saw blade, and are also arranged to receive the blade on either the right or left side. In ordering please specify whether right or left hand saws are desired. All machines are provided with a $1\frac{3}{8}$ -inch cold rolled steel shaft, and the balance wheels are extra heavy, insuring a smooth and satisfactory running saw.

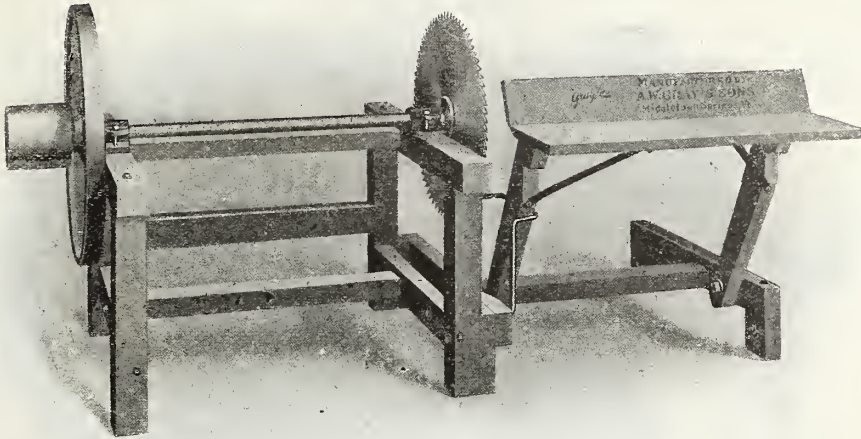
Gray's Circular Cord Wood Saw, WITH TILTING TABLE, NO. 7.



Price on application.

Prices subject to change without notice. (See note on inside first cover)

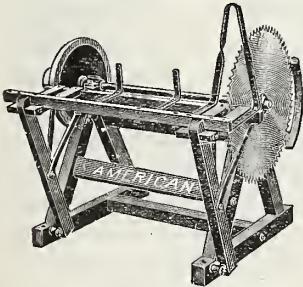
Gray's Circular Pole Saw Machine, WITH TILTING TABLE, NO. 9.



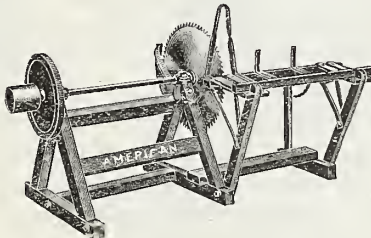
These are made with a table both sides of the saw, which is better adapted for sawing long wood, and can be used for sawing four-foot wood into stove wood. Saw machines made in this way can be used by one person sawing, as there is a rest for the wood both sides of the saw. Machine equipped with either a 24-inch, 26-inch, 28-inch, or 30-inch saw.

Price on application.

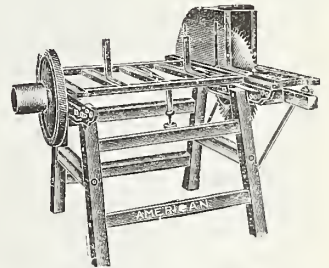
AMERICAN "CLIPPER" WOOD AND POLE SAWS.



No. 3. Cord Wood Saw.



No. 4. Wood or Pole Saw.



No. 6. Sliding Table Cord Wood Saw.

These saws cover every style of both tilting table and sliding table machines, with balance wheel placed on end of mandrel or on independent shaft under the frame.

The frames are made of selected seasoned hard wood, accurately mortised and tenoned, and securely bolted together by steel rods embedded in the joints and passing through from one side of the frame to the other.

No. 4 has extension table for cutting poles, or four or eight-foot cord wood. By changing the iron guard to the opposite end of the tilting table, this machine can be set up exactly as No. 3. These saws may be had either right hand or left hand, as ordered.

For those preferring a sliding table wood saw we offer the No. 6 machine. The carriage slides on iron ways with an easy movement and is counterbalanced by weight. When carriage is in forward position the saw is entirely covered by the hood.

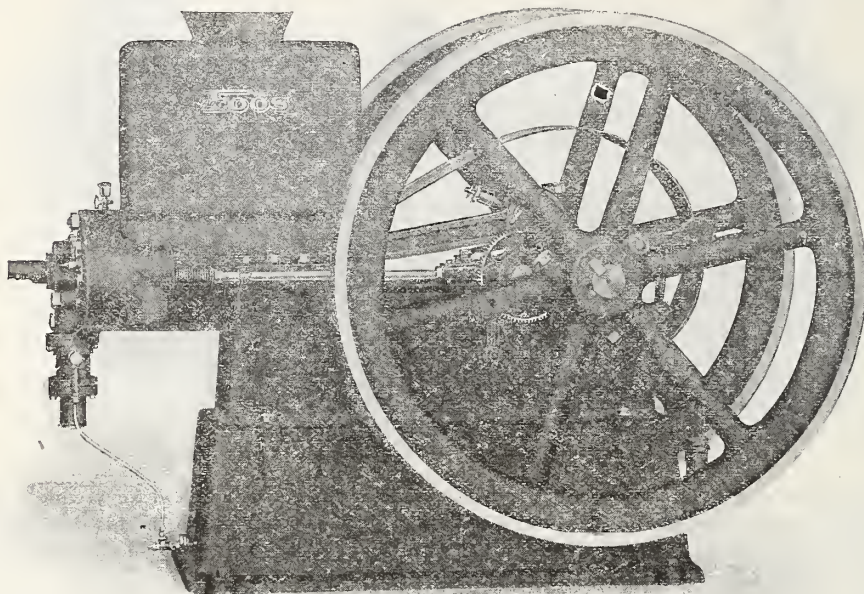
Prices on application.

Prices subject to change without notice. (See note on inside first cover.)

GASOLINE ENGINES.

FOOS STATIONARY AND PORTABLE ENGINES.

HORSE POWER SIZES: 1 1-2, 2 1-2, 4, 6, 8, 11.



FOOS STANDARD PORTABLE ENGINE.

The value of an engine is measured by the number of years it will run at its highest general efficiency. The time lost in operation, repair bills, attendance, fuel consumption and depreciation should be charged all to the engine account. The original purchase price is all that is definite in the final cost and is relatively unimportant. Operating cost is constant and begins with the first turn of the fly wheels, the amount depending largely upon design and construction and the material put into the engine by the manufacturers. The purchaser of an engine simply gets a machine that turns fuel into power, for which it will use in ten years in gas, oil or gasoline from five to ten times the original purchase price. Naturally, also, engines wear out—some parts sooner than others. The cheapest engine is one that will run for the greatest number of years—in which replacements are unnecessary or reasonable in cost. The durability of an engine depends on correct design, careful construction and material best suited for actual service conditions. To stop an engine to get to the governor or oil cups; to dismantle half of its parts to clean an igniter, examine a valve or make some simple adjustment, is one of the most expensive results of incorrect design. All parts should be in full view and quickly accessible; the design should be such that one part can be entirely removed without disturbing another part.



FOOS JUNIOR EQUIPMENT NO. 3.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)

10 REASONS WHY LETZ MILLS GRIND BETTER FEED AT LESS COST. 10

1. FINE GRINDING:—Fine as flour in one operation.
2. WET GRAIN GRINDING:—Will grind ear corn saturated in water.
3. LIGHT RUNNING:—Letz Plates shear the grain.
4. SILENT RUNNING:—Letz Grinding Plates make no noise.
5. QUICK CHANGEABLE PLATES:—Five minutes only to change plates.
6. SELF-SHARPENING PLATES:—Letz plates sharpen themselves when running together.
7. SELF-ALIGNING PLATES:—Burrs cannot get out of alignment.
8. LONG LIVED:—1,000 to 3,000 bushels on one set of plates.
9. LARGE CAPACITY:—Grinds more bushels on less fuel.
10. EFFICIENT END THRUST BEARING:—The vital spot of a feed grinder.



Ear Corn in Water.



Which Is Your Choice?

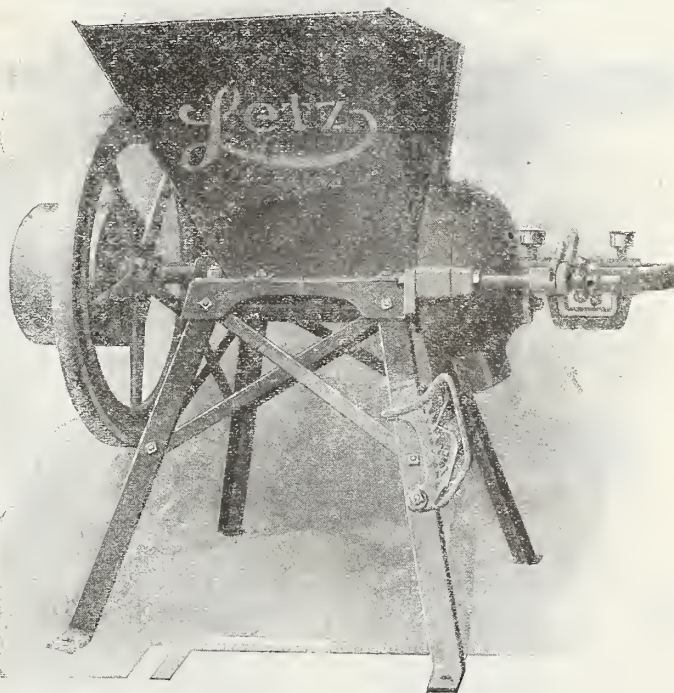


9 SIZES.

17 STYLES.

**FOR EVERY POSSIBLE USE
AND HORSE POWER.**

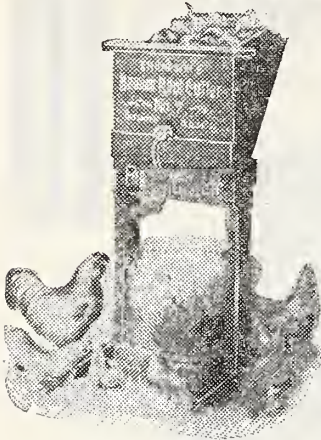
Wheat, rye, oats, barley, ear corn, shell corn, millet—no matter what you want to grind there's a Letz Grinder to fit your need



Price and catalog on application.

Prices subject to change without notice. (See note on inside first cover.)

BANNER ROOT CUTTER.



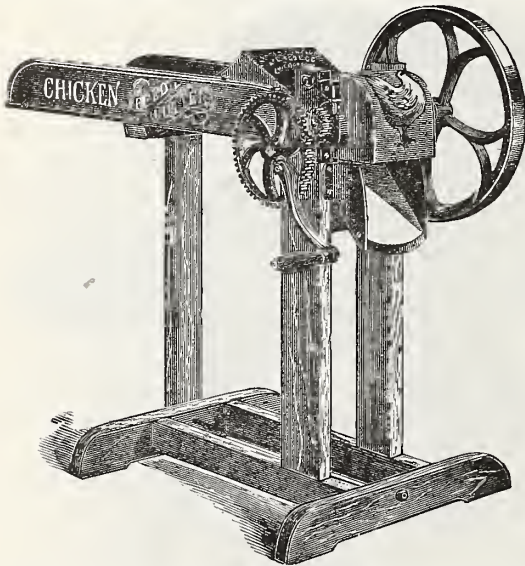
BANNER CUTTER NO. 7.

Prominent poultrymen all over the country have taken up the matter of green food for their fowls. It is, in fact, a hen's natural food. It is a great egg producer in itself, because it keeps the body of the hen in a good, healthy condition, and healthy hens are the only egg producers, no matter what the breed. Not only do roots make healthy hens, but their economy as food is astonishing.

It cuts fast and is easy running. Leaves the feed in fine ribbon-like strips that make choking impossible. Fowls large or small can safely eat the feed. The knives are adjustable and made of the very best of steel. An iron grate in bottom of hopper lets dirt and gravel escape before reaching the knives. In this cutter we offer the poultrymen a low priced, high grade, nicely finished and mechanically constructed machine, and feel that anyone who desires to feed roots and vegetables to their flocks can well afford to own one. Two to five minutes will cut enough feed for a large flock of fowls.

CHICKEN FEED CUTTER.

INVALUABLE TO POULTRY RAISERS.



This is a highly efficient machine for cutting clover, hay or other feed into extremely short lengths. It is made with three knives $6\frac{1}{4}$ inches long, and a self-feeding comb roller, which straightens the feed as it is presented to the knives, making a more uniform length of cut. It cuts very rapidly, being one of the fastest machines of its size.

Cuts 1-4, 7-16 and 3-4 inches.

Price on application.

Prices subject to change without notice. (See note on inside first cover.)



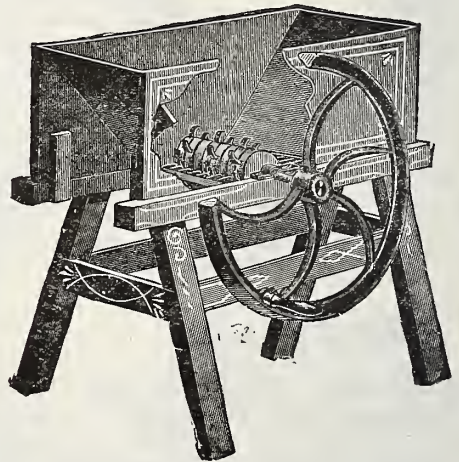
BANNER CUTTER NO. 20.

The No. 20 Banner Root Cutter is made for hand power and is the kind and style that meets with the largest sale, because most of the farmers who feed roots to stock want a machine that is run by hand. **It has a capacity of 30 to 50 bushels per hour,** although it will cut at the rate of a bushel a minute easily on the test.

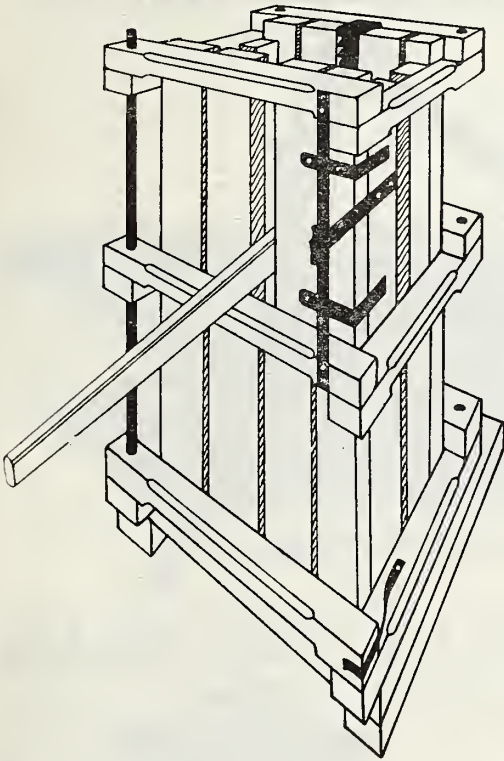
It is well built, nicely finished, runs easily, feeds itself, separates the dirt from the cut feed, and, take it all around, it is all that could be desired in the way of a first-class root cutter for all ordinary requirements.

It is supplied with the best steel knives. The condition of the fodder after passing through this machine is left in the same desirable shape, to avoid choking, as comes from all other Banner Root Cutters.

Champion Root Cutter.



This well-known root or vegetable cutter has been on the market for many years, and it is too well known to need further description. It is well made of good material.



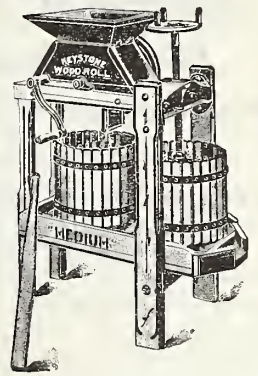
PAPER PRESS.

**TAKES CARE OF WASTE
and
TURNS IT INTO MONEY.**

An efficient, quick working, convenient and low priced press for baling waste paper.

Price on application.

Wood Roll Cider Mill.



Rolls are hard wood fitted with high carbon steel cutters. Adjustment is quick and positive. Hopper is large. Gearing heavy and easy running. Frame, screw, cross head, tubs and drain board same as in iron rolling mills.

Price on application.

MUDGETT TANK HEATER.



The most serviceable tank heater on the market. Twenty-four inches high, rectangular in shape, will accommodate 12-in. to 14-in. wood, weighs 200 pounds and will not tip over in the water. The ash pan and basket grate are removable and grates can be renewed at small expense. One length of galvanized pipe with damper and pipe cap is furnished. These heaters are built to last a lifetime.

Price on application.



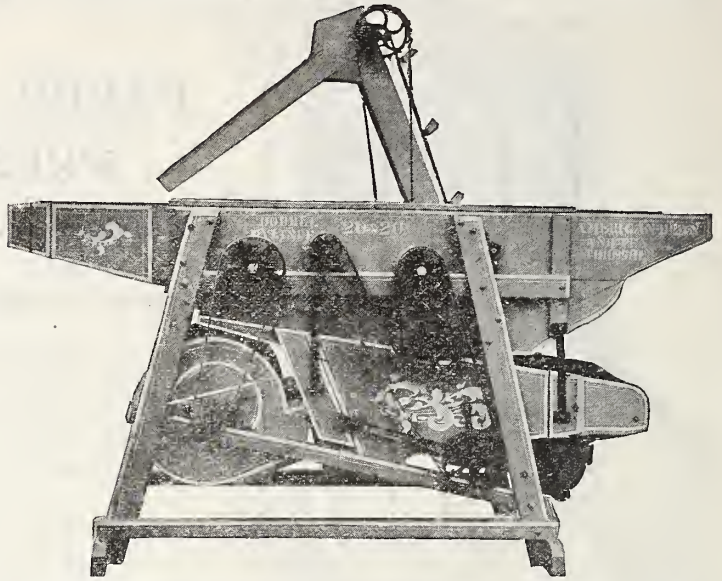
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No. 14.

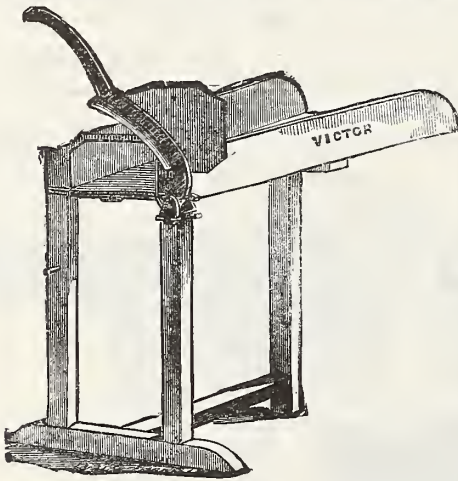
AMERICAN Double Cylinder BEAN and PEA THRESHER.

Strong, Rugged, Efficient.**EVERY BUYER A SATISFIED CUSTOMER.**

This machine will thresh all varieties of beans (or peas) directly from the rankest growing vines, without splitting the seed. It takes all the seed from the vines and pods in a clean, marketable condition, and shreds the vines, making them valuable for fodder.

Price on application.

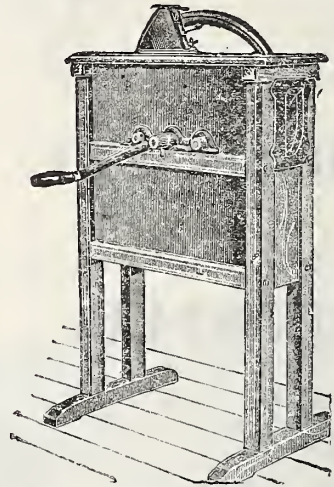
Victor Feed Cutter.



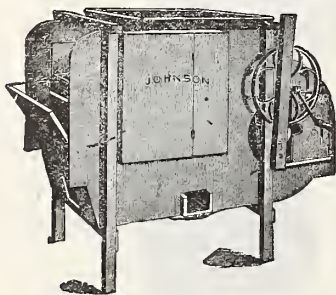
This iron handle lever cutter is so simple and easy to work as to commend it to everybody who has but a moderate amount of stock to feed. The knife is easy to adjust, grind and keep in repair.

Price, \$3.50 to \$6.00.

"K. & W." CORN SHELLER.



Has separator, and large, heavy balance wheel. The working parts are held firmly together by solid shaft boxes or bearings. One of the most popular shellers on the market. Made in one size only. Complete with blower attachment.

Price on application.

JOHNSON FAN MILL.

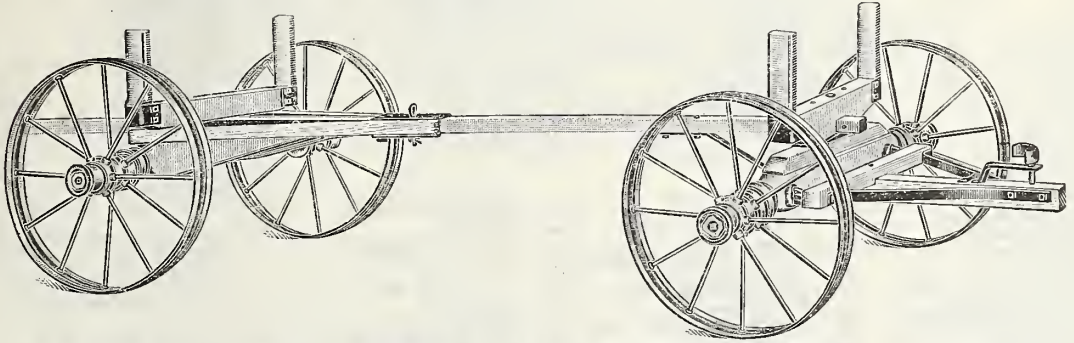
The fan mill is indispensable to a well-regulated grain barn. This mill runs the sound, clean grain to one side of the mill, while the sand and small seeds pass out at the other, and the heavy chaff and heads are caught in a receptacle behind the machine. It will not only clean grain, but also grass seed in the best manner.

Price on application.

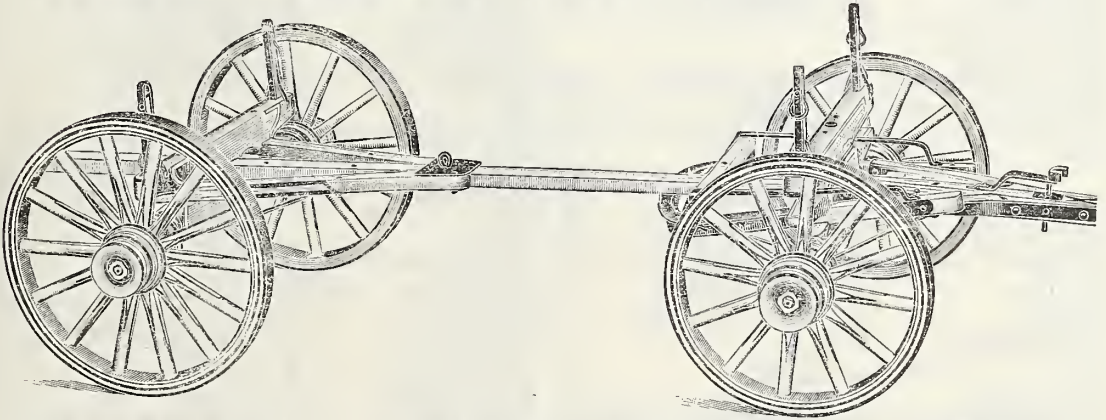
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STEEL CONSTRUCTED FARM TRUCKS.

We emphatically recommend these trucks as adapted for all kinds of farm work, being exceptionally well made, and so constructed as to carry any style farm wagon box. The frames are solidly put together, and are of especial value in hauling **heavy loads**, being built with that end in view. Are equipped with either steel wheels and axles, or heavy wood wheels.



WISCONSIN TRUCK, WITH 3 X 9 INCH SKEIN, 28 AND 30 INCH STEEL WHEELS, AND 4 X 3-8 INCH TIRES.

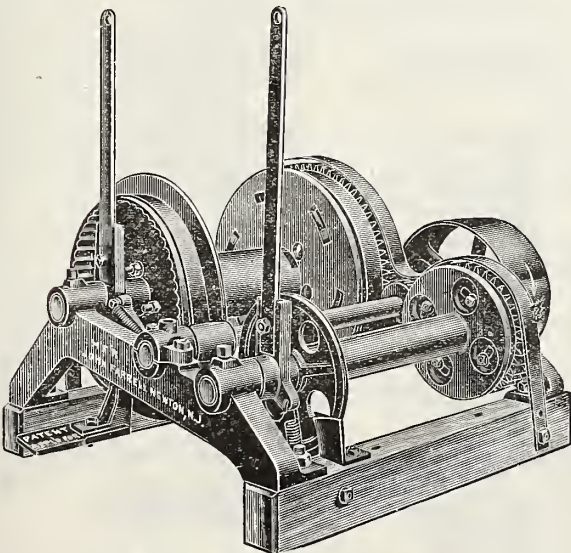


CRESCENT TRUCK, WITH 3 1-4 X 9 INCH SKEIN, 30 AND 36 INCH WOOD WHEELS, AND 3 X 3-8 INCH TIRES.

Write for quotations.

THE FARRELL GEARED HOIST.

This machine is especially designed to save time and labor in unloading hay, hauling ice, etc. This hoist saves one man and team, and from one-third to one-half the time in unloading hay. The man on the load operates it by a rope attached to the operating levers. The load is under perfect control at all times, and may be held, raised or lowered at will. New patented ratchet device holds the load at any point without attention. The machine is equipped with powerful band brake. Can be run by a 4 horse power gasoline engine in unloading hay. Weight, 325 pounds. Other styles designed for special purposes also manufactured.



STYLE B HOIST. LATEST MODEL.

Prices on application.

Prices subject to change without notice. (See note on inside first cover.)

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